

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Nakkon Sawan Prefecture, Chiyaphum Prefecture		
2. NAME OF STUDY	Nong Bua - Ban Lam Chi Bon Highway Project	2. PROJECT COSTS	(US\$1=20Bahts)		
3. SECTOR	Transportation/ Road		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.		(US\$1,000)	1) 30,600	17,300	13,300
5. TYPE OF STUDY	F/S		2)		
6. COUNTERPART AGENCY	Department of Road Ministry of communication	3. CONTENTS OF MAJOR PROJECT(S)	3)		
7. OBJECTIVES OF STUDY	Provincial road improvement	Road length			
8. DATE OF S/W	Jul. 1978	Improvement	42 km		
9. CONSULTANT(S)	Nippon Koei Co., Ltd. Katahira & Engineers	New Construction	113 km		
10. STUDY TEAM	No. of Members 11 Period Jun. 1979 - Feb. 1980 (8 months)	Total	155 km		
	Total M/M 43.4	Road width	9.0 - 10.0 km		
	Japan 18.5	Pavement	SBST		
	Field 24.9	Bridges	777.0m in total length		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic Survey Traffic Survey	Implementation Period:	Apr. 1981 - Dec. 1983		
12. EXPENDITURE	Total 104,520 (¥000) Contracted 103,547	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR	
		Feasibility: Yes	21.7%		
		Conditions and Development Impacts:			
		(1) Connection between east and west links			
		(2) Solution of interruption section during the rainy season.			
		(3) Increase of agricultural production			
		(4) Improvement of local road network			
		5. TECHINCAL TRANSFER			
		(1) OJT: Discussion about route selection. Traffic forecast and development benefits.			
		(2) Trainee: 1 engineer			
		1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Discontinued or Cancelled <input type="checkbox"/> Processing		
		(Description)	1983 Sep. OECF loan agreement (5,770 million yen) 1984 Dec. D/D completed 1986 Feb. Construction commenced 1988 Aug. Construction completed		
		2. MAJOR REASONS FOR PRESENT STATUS	- large development impact - good linkage with other major road - high priority - effective administration		
		3. PRINCIPAL SOURCES OF INFORMATION	①		

和名 ノンブアーバンラムチボン道路建設計画

(F/S, (M/P)+F/S, D/D)



PROJECT SUMMARY (F/S)

ASE THA/S 307/80

Compiled March 1986  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Bangkok metropolitan area		
2. NAME OF STUDY	Bangkok Urban Truck Terminals Construction Project	2. PROJECT COSTS	(US\$1= 20 Bahts)		
3. SECTOR	Transportation/ Land Transportation		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.			42,033		
5. TYPE OF STUDY	F/S	3. CONTENTS OF MAJOR PROJECT(S)			
6. COUNTERPART AGENCY	Department of Land Transport	Description	Scale		
7. OBJECTIVES OF STUDY	Traffic plan	Truck terminal	Cargo handling: 12,000 t/day		
8. DATE OF S/W	Jan.1979	Parking			
9. CONSULTANT(S)	Pacific Consultants International Nitsu Research Institute	Public parking			
10. STUDY TEAM	No. of Members 9 Period Aug.1979 - Mar.1980 (8 months)	Maintenance facilities			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Warehouse district			
12. EXPENDITURE	Total 83,169 (¥000) Contracted 79,340	Implementation Period:			
		4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR	
		Feasibility: No	10%		
		Conditions and Development Impacts:			
		Condition: Target year 2000	Project road includes intra urban tollway, circumferencial road, outer ring road		
		Development Impacts:	-Increase of profit to the owner by regular operation -Decrease in accidents by supplying welfare facilities to drivers -Increase in operation time by improving inspection and maintenance		
		5. TECHINICAL TRANSFER	Technical advice on demand forecasting, traffic survey, and economic analysis.		
		1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled		
		(Description)	Detailed design was partially undertaken by local consultants. In June,1987 Ministry of Transport and Communication has approved the commencement of the construction. The truck terminal at Rangsit, which is located in the north of Bangkok, is to be improved as private sector project. Construction of the truck terminals in the west has been suspended. Due to rapid urbanization, some sites for terminals have been used for other purposes.		
		2. MAJOR REASONS FOR PRESENT STATUS			
		3. PRINCIPAL SOURCES OF INFORMATION	①		

和名 首都圏トラックターミナル建設計画

(F/S, (M/P)+F/S, D/D)

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Lampang City, Lampang Province, northern part of Thailand area 22,700 ha			1. PRESENT STATUS <input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input checked="" type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Mae Wang-Kew Lom Irrigated Agriculture Development Project	2. PROJECT COSTS	US\$1=20B in 1979 Total Cost Local Cost Foreign Cost 1) 34,880 19,506 15,374 (US\$1,000) 2) 3)			
3. SECTOR	Agriculture/ General	3. CONTENTS OF MAJOR PROJECT(S)	Irrigation area : 22,700ha Main irrigation canal : 100.12 km Tributary irrigation canal : 79.65 km Main drainage canal : 240.77 km Field improvement : 15,400 ha			(Description)  Thai Government enacted Law of agricultural infrastructure improvement and, was vigorously promoting improvement of agricultural infrastructure which makes two-period cropping by improving and facilities, as a measure of policy to expand self-sufficiency of agricultural products and export. However, this project was planned with farmers' sharing of the cost for a part of it, and the cost turned out to be much higher than expected and the debt of foreign exchange of Thai Government increased, which have made this kind of project suspended.
4. REFERENCE NO.		Implementation Period:	Oct.1980 - Sep.1987			
5. TYPE OF STUDY	F/S	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
6. COUNTERPART AGENCY	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	Feasibility: Yes	27.1%	25.3%		
7. OBJECTIVES OF STUDY		Conditions and Development Impacts:	Conditions: Considering the production of paddy crop is relatively high, promotion of production during dry season is planned by utilizing the water of Kiv Lom Dam. To do this field improvement should be implemented. Development Impacts: Large increase of benefit by double cropping through effective use of existing water resource is expected.			
8. DATE OF S/W	Feb.1979	10. STUDY TEAM	No. of Members 10 Period Jul.1979 - Mar.1980 (9 months)  Total M/M 47.04 Japan 21.97 Field 25.07			2. MAJOR REASONS FOR PRESENT STATUS
9. CONSULTANT(S)	Sanyu Consultants Inc.	11. ASSOCIATED AND/OR SUBCONTRACTED STUDY				There are no plans to start this project because of the reason noted above.
12. EXPENDITURE	Total 115,644 (¥000) Contracted 107,095	5. TECHNICAL TRANSFER	Training of and technical transfer to staffs of RID in Thailand and Japan.			3. PRINCIPAL SOURCES OF INFORMATION
						①

和名 メワンかんがい農業開発計画

(F/S, (M/P)+F/S, D/D)

## PROJECT SUMMARY (D/D)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Bangkok Metropolitan Area	1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Discontinued or Cancelled <input type="checkbox"/> Processing
2. NAME OF STUDY	Bangkok Telephone Network Project: Local Cable Networks	2. PROJECT COSTS	Total Cost    Local Cost    Foreign Cost	(Description)  1987 Jul. OECF L/A completed for extending telecommunication network	
3. SECTOR	Communications & Broadcasting/ Telecommunication	(US\$1,000) 1) 2) 3)			
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)			
5. TYPE OF STUDY	D/D	1) Detailed design of local cable network for five exchanges (Pronchit, Chinwatana, Packrett, Ramintra, and Onutt-I) 2) Additional detailed designs for three exchanges (Kurontoi, Labrana and Ekachai)			
6. COUNTERPART AGENCY	Telephone Organization of Thailand	Implementation Period:	Mar.1985 - Mar.1986		
7. OBJECTIVES OF STUDY	Detailed designs for 8 telephone exchanges.	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR    FIRR		
8. DATE OF S/W	Jul.1978	Feasibility:			
9. CONSULTANT(S)	Nippon Telecommunication Consulting Co.	Conditions and Development Impacts:	Detailed designs are based on the program in the 4th National Economic Development Plan. Five exchanges correspond to Package I of Phase 2 and three additional exchanges to Package II of Phase 1.		
10. STUDY TEAM	No. of Members 12 Period Aug.1978 - Jun.1979 (11 months) Oct.1979 - Aug.1980 (11 months) Total M/M 107.79 Japan 49.63 Field 59.16	5. TECHNICAL TRANSFER	OJT for counterparts		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		12. EXPENDITURE	Total 278,789 (¥'000) Contracted 277,097		
				3. PRINCIPAL SOURCES OF INFORMATION	①

和名 バンコック市内線路網実施設計

{F/S, (M/P)+F/S, D/D}

**PROJECT SUMMARY (F/S)**

ASE THA/A 304/81

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Right bank of PaSak River, SaraBuri Province			1. PRESENT STATUS <input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Kaeng Khoi-Ban Mo Pumping Irrigation Project	2. PROJECT COSTS	Total Cost	Local Cost	Foreign Cost	
3. SECTOR	Agriculture/ General		(US\$1,000) 1) 40,700	24,500	16,200	(Description) 1982.7.16 OECF L/A (E/S) ¥190 million The detailed design was completed by Sanyu Consultants Inc. and Chuo Kaihatsu Corporation during July 1984 and June 1985, with an E/S loan from OECF (L/A in July 1987, 190 million yen). However, the adjustment of water rights (with beneficiaries of the waterway between Chainat and PaSak) has not been settled, the project has been suspended.
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)	Pumping field : Diameter 1,000mm X 560kw X 7 stations (Q = 17.6 cu.m/s) Irrigation canal: 147.58 km Drainage canal A: 21.80km Pilot field : 260 ha			
5. TYPE OF STUDY	F/S	Implementation Period:	1983 - 1988			
6. COUNTERPART AGENCY	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
7. OBJECTIVES OF STUDY	Feasibility study on irrigated agricultural development project	Feasibility: Yes	16.9%	14.3%		
8. DATE OF S/W		Conditions and Development Impacts:	-Planting of 100% in rainy season and 20% in dry season will be done by completion of irrigation facilities to increase agricultural profit. -Training related to improvement of terminal facilities, water management and culture technique will be done in demonstration farm.			
9. CONSULTANT(S)	Sanyu Consultants Inc. Other	*EIRR calculated (14.3%) includes on-farm.				
10. STUDY TEAM	No. of Members 10 Period Jun.1981 - Jan.1982 (8 months)  Total M/M 37.55 Japan 17.80 Field 19.75	5. TECHNICAL TRANSFER	Transfer to staffs of RID in Thailand and Japan was done.			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY						
12. EXPENDITURE	Total 96,370 (¥'000) Contracted 90,677					
		2. MAJOR REASONS FOR PRESENT STATUS			Although RID and farmers of project site wish to promote the projects, the problem on water rights has not been concluded.	
		3. PRINCIPAL SOURCES OF INFORMATION			①	

和名 ケンコイ・バンモーポンプかんがい計画

{F/S, (M/P)+F/S, D/D}

**PROJECT SUMMARY (M/P + F/S)**

ASE THA/S 202A /82

Compiled March 1986  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	Bangkok City and Thonburi area located at the other side of Chao Phaya river.			1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Bangkok Sewerage System Project	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	(US\$1=27.3B) Total Cost    Local Cost    Foreign Cost 1)            116,160       69,100 (US\$1,000)    2)			
3. SECTOR	Public Utilities/ Sewerage	3. MAJOR PROJECT(S) PROPOSED	Bangkok City has some problems such as flooding in rainy season and water pollution of river in dry season. Several studies on those problems have been carried out. This study was to review the previous study reports and to make new master plan in order to obtain the practical plan. Scope of the study is limited for sewerage system planning.			(Description)  After the study, F/S was implemented and Japanese experts went to Thailand for technical assistance.
4. REFERENCE NO.		4. CONDITIONS AND DEVELOPMENT IMPACTS	Study area is 37,000 ha, same as previous CDM plan, which was divided into 10 sewerage districts. Separate systems have been fundamentally adopted for the system. In central area of the city, however, a combined system has been temporarily adopted. Treatment plant is located at the vacant lot of the Tobacco Public Corporation. Treatment method is modified aeration system.			
5. TYPE OF STUDY	M/P+(F/S)	5. TECHINCAL TRANSFER	(1) Individual short time training program executed for two persons. (2) Preparation of reports with trainees during the training period. (3) Employment of local consultants for land surveying. (4) Guidance of water quality test			
6. COUNTERPART AGENCY	Department of Drainage and Sewerage, BMA	11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic Survey			
7. OBJECTIVES OF STUDY	Planning on the countermeasure of pollution and flood	12. EXPENDITURE	Total            397,120 (¥'000) Contracted    377,556			
8. DATE OF S/W	Mar.1979	2. MAJOR REASONS FOR PRESENT STATUS		1. Priority is high as part of the Metropolitan Development Plan. 2. The sewerage problem is deeply related to flooding and river pollution.		
9. CONSULTANT(S)	Nihon Suido Consultants Co., Ltd.	3. PRINCIPAL SOURCES OF INFORMATION		①		
10. STUDY TEAM	No. of Members 10 Period Aug.1979 - Feb.1980 (6 months) Jul.1980 - Jul.1982 (23 months) Total M/M 186.3 Japan 114.3 Field 72.0					

和名 バンコック市下水道整備計画

{M/P, M/P+(F/S), Basic Study, Other}

## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Bangkok City	1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Bangkok Sewerage System Project	2. PROJECT COSTS	(US\$1=27.3B) Total Cost    Local Cost    Foreign Cost (US\$1,000)    1)            32,300            23,200 2) 3)		
3. SECTOR	Public Utilities/ Sewerage	3. CONTENTS OF MAJOR PROJECT(S)	Project area : 970 ha Intercepting sewer : d 3,000-2,400mm for L=7,100m Combined sewer : d 8,500-2,000mm for L=1,300m Intermediate Pumping Station: 3 stations, Q=13-24cu.m/min Plant : Q=135,000 cu.m/day Inf.BOD= 160 mg/l Eff.BOD= 60 mg/l (Modified aeration process: grit chamber, aeration tank, final sedimentation basin, chlorination chamber, digester, etc.)	(Description)  The development of the sewerage system has been delayed; because higher priority is given to drainage and inundation control projects in Bangkok. Bangkok Metropolitan Administration(BMA) have undertaken D/D on two sewage treatment plants (the capacity: 30,000 cu.m/day and 25,000 cu.m/day). BMA is preparing a request to Japan on another treatment plan with a capacity of 60,000 cu.m/day. 1991 To be informed the above plan is promoting by own country (Thailand) fund.	
4. REFERENCE NO.		Implementation Period:	1984 - 1988		
5. TYPE OF STUDY	(M/P)+F/S -	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR    FIRR	2. MAJOR REASONS FOR PRESENT STATUS	
6. COUNTERPART AGENCY	Department of Drainage and Sewerage, BMA	Feasibility: Yes			
7. OBJECTIVES OF STUDY	F/S on first phase program, as recommended in M/S	Conditions and Development Impacts:		Reason of project postponed: (1) Domestic reasons: Higher priority was given to drainage and inundation control projects than sewerage system project in Bangkok and financial problem. (2) Others: Several countries proposed some other assistance to Bangkok Authority and World Bank also offered assistance to drainage project in Bangkok.	
8. DATE OF S/W	Mar.1979	In 1982, the celebration of the 200th anniversary of Bangkok as Capital of Thailand, sewerage project was focussed to cope with the water quality problem of canal in the city. Sewerage project and Water Disposal Plan were made as a pair. F/S was conducted for the area selected by the investment efficiency as recommended in M/P. Development impacts are expected with pollution prevention of canal and decrease of inundation problem, which area, however, can not be scaled quantitatively.			
9. CONSULTANT(S)	Nihon Suido Consultants Co.,Ltd.	5. TECHINCAL TRANSFER		3. PRINCIPAL SOURCES OF INFORMATION	
10. STUDY TEAM	No. of Members 10 Period Aug.1979 - Feb.1980 (6 months) Jul.1980 - Jul.1982 (23months) Total M/M 186.3 Japan 114.3 Field 72.0	(1) Carried out training program for two persons (2) Employment of the local consultant for land survey (3) Equipment granted and instructed for water quality tests			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic survey			①	
12. EXPENDITURE	Total 397,120 (¥'000) Contracted 377,556				

和名 バンコック市下水道整備計画

(F/S, (M/P)+F/S, D/D)



PROJECT SUMMARY (M/P + F/S)

ASE THA/S 203A /82

Compiled March 1986  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	City of Bangkok			1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Bangkok Solid Waste Management	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	Total Cost	Local Cost	Foreign Cost	
3. SECTOR	Public Utilities/ Urban Sanitation		(US\$1,000) 1) 17,248	8,667		(Description) Followed by F/S.
4. REFERENCE NO.		3. MAJOR PROJECT(S) PROPOSED	2)			
5. TYPE OF STUDY	M/P+(F/S)	The master plan to improve waste disposal system by the year of 2000 and 67 immediate action programmes.				
6. COUNTERPART AGENCY	Public Cleansing Department Bangkok Metropolitan Administration	(1) The master plan includes construction and introduction of: 5 composting plants, 2 incineration plants, 3 final disposal sites, 1,190 collection vehicles, 88 road sweepers, 5 river cleaning boats, 110 barges, 25 dump trucks, 18 bulldozers				
7. OBJECTIVES OF STUDY		(2) The immediate action programmes in which 3 levels of priority is shown include improvements in : 1) discharge and collection system 2) transport and transferring system 3) composting plants 4) final disposal system 5) administrative system 6) countermeasures to floods				
8. DATE OF S/W	Mar. 1979	The total cost above pertains to the short-term improvement plan.				
9. CONSULTANT(S)	Tokyo Metropolis Environmental Service Corporation	4. CONDITIONS AND DEVELOPMENT IMPACTS	Development Impacts: Public health and living environment for citizens are remarkably improved by modernization of waste disposal systems.			
10. STUDY TEAM	No. of Members 55 Period Aug. 1979 - Feb. 1980 (6 months) May 1980 - Sep. 1982 (29 months) Total M/M 278.08 Japan 124.54 Field 153.54	5. TECHNICAL TRANSFER	(1) logical way of thinking of public cleansing works (2) reception of trainees (3) effective application of local consultants (4) equipment donations and training for effective use			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY					2. MAJOR REASONS FOR PRESENT STATUS	
12. EXPENDITURE	Total 491,070 (¥'000) Contracted 447,098				3. PRINCIPAL SOURCES OF INFORMATION ①	

和名 バンコク市都市廃棄物整備計画

{M/P, M/P+(F/S), Basic Study, Other}

## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	City of Bangkok		
2. NAME OF STUDY	Bangkok Solid Waste Management	2. PROJECT COSTS	(US\$1=26.25B)		
3. SECTOR	Public Utilities/ Urban Sanitation		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.			(US\$1,000)	1) 578,712	2) 352,590
5. TYPE OF STUDY	(M/P)+F/S	3. CONTENTS OF MAJOR PROJECT(S)	Construction of final disposal site 3 1,500t/d Construction of refuse incineration plant 2 1,500t/d X2 Construction of rapid type composting plant 2 800t/d		
6. COUNTERPART AGENCY	Public Cleansing Dept., BMA	Implementation Period:	1985 - 2000		
7. OBJECTIVES OF STUDY		4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR	
8. DATE OF S/W	Mar. 1979	Feasibility:	Yes		
9. CONSULTANT(S)	Tokyo Metropolis Environmental Service Corporation	Conditions and Development Impacts:	To properly dispose of whole waste targetting the completion in the year 2000 and considering local economic situations. As the development impacts, public health and living environment for citizens are remarkably improved by modernization of waste disposal systems.		
10. STUDY TEAM	No. of Members 55 Period Aug. 1979 - Feb. 1980 (6 months) May 1980 - Sep. 1982 (29 months) Total M/M 278.08 Japan 124.54 Field 153.54	5. TECHNICAL TRANSFER	(1) training to the local staff through OJT. (2) reception of trainees, 6 local staff (3) effective application of local consultants.		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Discontinued or Cancelled <input type="checkbox"/> Processing		
12. EXPENDITURE	Total 491,070 (¥'000) Contracted 447,098	(Description)	A Japanese expert was sent to BMA in 1983 - 1989, and the short-term measures proposed by the study were implemented during the period. The Phase II study is being implemented in FY 1990 by the JICA team. Another Japanese expert is currently posted to BMA.		
		2. MAJOR REASONS FOR PRESENT STATUS	(1) Waste disposal systems shall be updated according to economical development as waste are continuously generated. (2) High priority: One of 5 major projects in Bangkok metropolis 5 year plan. (3) Implementation: recommendations will be wisely implemented by National Ministry of Thailand and Bangkok Metropolitan Administration.		
		3. PRINCIPAL SOURCES OF INFORMATION	①		

和名 バンコク市都市廃棄物整備計画

(F/S, (M/P)+F/S, D/D)

## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	17 changwats of the Norther Regions (170,000 sq.km)			1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Road Development in the Northern Region	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	(US\$1=23Bahts) Total Cost    Local Cost    Foreign Cost 1)                    36,500 2)			
3. SECTOR	Transportation/ Road	3. MAJOR PROJECT(S) PROPOSED	The study selected priority road sections by taking into account development potentials by area. 44 links (total length 1,200km) were selected for improvement or for new construction. A pre-feasibility study was undertaken on 31 links (860km) which were considered for short- and medium-term implementation and narrowed down to 16 links (410km) for the subsequent feasibility study.			(Description) The feasibility study was conducted on 14 routes selected from 16 short-term priority links.
4. REFERENCE NO.		4. CONDITIONS AND DEVELOPMENT IMPACTS				
5. TYPE OF STUDY	M/P+(F/S)	Development impacts: 1) The project will stimulate the regional stagnation caused by the shortage of land and low income by providing better transport infrastructure. 2) The project will contribute to the productivity improvement and diversification of agricultural production. 3) The road density of the Northern Region is lower than elsewhere, and the project will promote better communication.				
6. COUNTERPART AGENCY	Dept. of Highways (DOH), Ministry of Communications	5. TECHINCAL TRANSFER				
7. OBJECTIVES OF STUDY	Formulation of a master plan for highway development and feasibility analysis of priority road sections (new construction and improvement)	1) OJT for the counterparts on the method of selecting priority road sections 2) Participation of 1 counterparts in the JICA training program 3) Report writing				
8. DATE OF S/W	Dec.1979	3. PRINCIPAL SOURCES OF INFORMATION				
9. CONSULTANT(S)	Nippon Koei Co., Ltd. and Katahira & Engineers International	①				
10. STUDY TEAM	No. of Members 12 Period Jun.1980 - Mar.1982 (22 months)  Total M/M 140.33 Japan 16.03 Field 124.3	2. MAJOR REASONS FOR PRESENT STATUS				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Traffic survey, road inventory survey					
12. EXPENDITURE	Total 385,805 (¥'000) Contracted 381,842					

和名 北部地方道路網整備計画

{M/P, M/P+(F/S), Basic Study, Other}

## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	17 changwats of the Norther Regions (170,000 sq.km)			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Road Development in the Northern Region	2. PROJECT COSTS	(US\$1=23Bahts)			
3. SECTOR	Transportation/ Road		Total Cost	Local Cost	Foreign Cost	(Description)  1983 - 1986 D/D completed by DOH Sep. 1983 OECF loan agreement (5,770 million yen) Jan. 1986 Construction started Aug. 1988 Construction completed
4. REFERENCE NO.		(US\$1,000)	56,800	32,000	24,800	
5. TYPE OF STUDY	(M/P)+F/S	1)				
6. COUNTERPART AGENCY		2)				
7. OBJECTIVES OF STUDY		3)				
8. DATE OF S/W	Dec.1979	3. CONTENTS OF MAJOR PROJECT(S)	The feasibility study was undertaken on 14 links (410km) requested by DOH. The analysis indicated 12 links (394km) as feasible. - 11 links (F4 standard) 378km - 1 link (F5 standard) 16km			
9. CONSULTANT(S)		Implementation Period:				
10. STUDY TEAM	No. of Members 12 Period Jun.1980 - Mar.1982 ( months)  Total M/M 140.33 Japan 16.03 Field 124.3	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Feasibility: Yes	28.5-14.0			
12. EXPENDITURE	Total 385,805 (¥000) Contracted 381,842	Conditions and Development Impacts: 1) The Northern Region has limited availability of arable land because of difficult topography and has been underdeveloped. The proposed project will provide transport infrastructure and stimulate productive activities. 2) In order to establish a framework of balanced regional growth through better inter-regional communication, the study formulated a optimum plan to strengthen the road network, and proposed priority short- and medium-term routes. Development impacts: 1) The project will stimulate the regional stagnation caused by the shortage of productive land and low income by providing better transport infrastructure. 2) The project will contribute to the productivity improvement and diversification of agricultural production. 3) The road density of the Northern Region is lower than elsewhere, and the project will promote better communication.				
		5. TECHNICAL TRANSFER				
			2. MAJOR REASONS FOR PRESENT STATUS 1) Large impact: substantial contribution to the alleviation of regional disparities which was one of the major objectives of the 4th and 5th development plans. 2) Linkage with other projects: the proposed priority links were consistent with other priority road development projects. 3) Consistency with government policy: the Government of Thailand has been emphasizing public investments in the operation and maintenance of the existing roads, and the projects proposed by the study were consistent with this policy. 4) High priority: the Government has been emphasizing improvement of provincial roads and production-related roads, and the Northern Region has been given high priority in this regard.			
			3. PRINCIPAL SOURCES OF INFORMATION ①			

和名 北部地方道路網整備計画

(F/S, (M/P)+F/S, D/D)

**PROJECT SUMMARY (M/P + F/S)**

ASE THA/A 201A/82

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA			
2. NAME OF STUDY	Agricultural Cooperative Promotion	2 places in each part of north, central, northeast, south, totaling 8 places.			
3. SECTOR	Agriculture/ General	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.					
5. TYPE OF STUDY	M/P+(F/S)	3. MAJOR PROJECT(S) PROPOSED			
6. COUNTERPART AGENCY	Cooperative Promotion Department MOAC	We pointed realities and problems of organization, operations and management of agricultural cooperative of Thailand, and proposed basic idea for their improvement, based on case studies in each area.			
7. OBJECTIVES OF STUDY		1. Basic idea to strengthen the function of agricultural cooperative four strategic targets, strengthening of member's organization base, promotion of regional agriculture by conducting guidance of agriculture management, expansion of sales and purchase abiding by fair rule, realization of comprehensive agricultural financial system, are shown, and "total system" to facilitate all of them in a comprehensive way was proposed. 2. Establishment of Agricultural Cooperative			
8. DATE OF S/W	Apr. 1980	4. CONDITIONS AND DEVELOPMENT IMPACTS			
9. CONSULTANT(S)	The Institute for the Development of Agricultural Cooperation in Asia	1. We proposed that establishment of model Agricultural Cooperative should be chosen taking into consideration the difference of regional character and basic condition of each area. 2. Development effect of promoting agricultural cooperative is expected by planning of agricultural cooperative promotion, guidance to implement the plan, and dissemination of the fruits of model agricultural cooperative to neighboring cooperatives.			
10. STUDY TEAM	No. of Members 3 Period May. 1980 - Feb. 1982 (23 months)  Total M/M 37.21 Japan 27.36 Field 9.85	5. TECHNICAL TRANSFER			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		-Transfer of development study method during the period of M/P in July and Aug. 1980. -Discussion and cooperative operation in writing a report, and observation of Japanese case through acceptance of two trainees.			
12. EXPENDITURE	Total 127,935 (¥000) Contracted 107,192				
		1. PRESENT STATUS		<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued	
		(Description)		proceeding to F/S (later expert dispatched project type technical cooperation) 1. Thai Government requested cooperation to Japanese Government on the planning of establishing model agricultural cooperative based on the final report of Feb. 1981 2. S/W mission was dispatched to conduct F/S in July 1981. S/W was concluded and F/S mission was dispatched from July to Sept. 3. The final report of F/S was submitted in Mar. 1982, experts were dispatched upon its request for one and half year from Dec. 1982. Project type technical cooperation (5 years) started in July 1984.	
		2. MAJOR REASONS FOR PRESENT STATUS		-Thai Government accepted the results of basic concept shown in the final report of M/P. -Thai Government requested F/S to clarify and materialize means for agricultural cooperative promotion.	
		3. PRINCIPAL SOURCES OF INFORMATION		①	

和名 農業協同組合組織育成計画

{M/P, M/P+(F/S), Basic Study, Other}

PROJECT SUMMARY (M/P + F/S)

ASE THA/A 201B/82

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	In the districts of north, central, northeast, south, where four proposed cooperatives as model agricultural cooperative are located		
2. NAME OF STUDY	Agricultural Cooperative Promotion	2. PROJECT COSTS	(US\$1=23Bahts)		
3. SECTOR	Agriculture/ General		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.			1) 45,508	6,478	39,030
5. TYPE OF STUDY	(M/P)+F/S		2)		
6. COUNTERPART AGENCY	Cooperatives Promotion Department MOAC		3)		
7. OBJECTIVES OF STUDY		3. CONTENTS OF MAJOR PROJECT(S)	1. Projects to nurture agricultural cooperative 2. Establishment of consultant units and traveling guidance 3. Strengthening of training by agricultural cooperative training centers 4. Improvement of facilities of agricultural cooperative 5. Comprehensive financial measures		
8. DATE OF S/W	Jul. 1981	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR	
9. CONSULTANT(S)	The Institute for the Development of Agricultural Cooperation in Asia	Feasibility: Yes	Implementation Period:		
10. STUDY TEAM	No. of Members 6 Period May.1980 - Feb.1982 (23 months)  Total M/M 37.21 Japan 27.36 Field 9.85	Conditions and Development Impacts:	Conditions: 1. Establishment of promoting system in CPD. 2. Guidance of agricultural management and strengthening of sales activities. 3. Financial back up by the government 4. Cooperation with ACFT and CLT Development Impacts: 1. Improvement of management by agricultural cooperatives 2. Increase of employment opportunities, Increase of income, Decreasing the difference of income.		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHINICAL TRANSFER	-Transfer of research method during the period of F/S. -Discussion and cooperative operation in writing a report accepting two trainees.		
12. EXPENDITURE	Total 127,935 (¥'000) Contracted 107,192		1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Discontinued or Cancelled <input type="checkbox"/> Processing		
			(Description) Implementation completed 1. Thai Government requested project type technical cooperation and grant to Japanese Government in June 1983. 2. R/D for project type technical cooperation was concluded in July 1984, and five-year started. Project implementation period concluded in July 1989, currently two-year follow up is process. 3. In 1985, Agricultural Cooperative Training Center of Northeast Thailand was established by grant aid (598 million Yen)		
			2. MAJOR REASONS FOR PRESENT STATUS		
			3. PRINCIPAL SOURCES OF INFORMATION		
			①		

和名 農業協同組合組織育成計画

{F/S, (M/P)+F/S, D/D}



## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	East Coast Region			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	East Coast Water Resources Development Project	2. PROJECT COSTS	(US\$1=230Yen=23B)			
3. SECTOR	Social Infrastructures/ Water Resource Development		Total Cost	Local Cost	Foreign Cost	(Description) Jul.1982 OECF loan agreement on the pipeline (6,570 million yen) Jul.1982 OECF loan agreement on E/S of Nong Pla Lai Dam (320 million yen) Sep.1982 D/D completed Jun.1984 Construction completed Sep.1988 OECF loan agreement on the dam (4,357 million yen) Sep.1989 OECF loan agreement on construction of Mab Ta Phud - Sattahip Pipeline (1,750 million yen) Dec.1990 Construction of the pipeline (Mab Ta Phud - Sattahip) is under implementation
4. REFERENCE NO.		(US\$1,000)	1) 242,000	2) 103,870	3) 137,700	
5. TYPE OF STUDY	F/S	3. CONTENTS OF MAJOR PROJECT(S)				
6. COUNTERPART AGENCY	Royal Irrigation Department	Contents	Scale			
7. OBJECTIVES OF STUDY	Water Resources Development covering Rayong, Nong Pla Lai, Chon Buri Changwats	Construction of Nong Pla Lai Dam	Height: 30m, Crest L.: 4,000m			
8. DATE OF S/W	Dec.1980	Construction of pipeline between Doc Krai Dam and east coast region and of construction of Ban Bung Dam	Pipeline, length: 25 km Pipeline capacity: 80x10 cu.m/year			
9. CONSULTANT(S)	CTI Engineering Co., Ltd. Sanyu Consultants Inc. Nomura Research Institute	Implementation Period:	Jan.1984 - Nov.1986			
10. STUDY TEAM	No. of Members 11 Period Feb.1981 - Mar.1982 (13 months)  Total M/M 61.79 Japan 26.54 Field 35.25	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Geological survey	Feasibility: Yes	10.5%			
12. EXPENDITURE	Total 165,176 (¥'000) Contracted 149,826	5. TECHNICAL TRANSFER	Acceptance of Trainees: for about three months, four trainees despatched from the Government of Thailand pursued the study and training mainly field survey of water supply systems. In the long view, it is considered profitable to the trainees.			
		2. MAJOR REASONS FOR PRESENT STATUS				
		(1) High degree of priority: The industrialization of the east coast region was the No.1 priority project of the Government of Thailand. (2) RID was directly commissioned by the Prime Minister to push forward of the project.				
		3. PRINCIPAL SOURCES OF INFORMATION			①	





## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Chieng Mai and Lampoon Provinces			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Discontinued or Cancelled <input type="checkbox"/> Processing
2. NAME OF STUDY	Mae Kuang Irrigated Agriculture Development Project	2. PROJECT COSTS	Total Cost	Local Cost	Foreign Cost	
3. SECTOR	Agriculture/ General	(US\$1,000)	1) 204,400	126,600	77,800	(Description) Construction of first period: Left saddle dam was constructed. Construction was under direct management of RID and supervised by Sanyu Consultants, Inc. Construction of second period: Main and Right saddle dam have been constructed. A Chinese company has constructed and Sanyu Consultants, Inc. has supervised it. Construction of third period: Main and tributary canals have been under construction. An Italian company has constructed and Sanyu Consultants, Inc. has supervised it. 1982.7.16 OECF L/A (E/S) ¥430 million 1984.9.18 OECF L/A ¥2.3 billion 1985.10.4 " ¥9.197 billion 1987.9.21 " ¥2.805 billion
4. REFERENCE NO.		2) 223,600	138,700	84,900		
5. TYPE OF STUDY	F/S	3)				
6. COUNTERPART AGENCY	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	3. CONTENTS OF MAJOR PROJECT(S)	Dam(left saddle dam): banking 2.26 X 1 million cu.m, height 52.0m, length 650m Dam(main dam) : banking 5.58 X 1 million cu.m, height 77.0m, length 645m Dam(right saddle dam) : banking 1.44 X 1 million cu.m, height 41.0m, length 655m Main canal : 87.4 km, Secondary canal : 146.6 km Note: cost 2) includes tertiary canals and other terminal facilities.			
7. OBJECTIVES OF STUDY		Implementation Period:	Jan.1976 - Sep.1988			
8. DATE OF S/W	Dec.1980	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
9. CONSULTANT(S)	Sanyu Consultants, Inc. Taiyo Consultants Co.,Ltd.	Feasibility: Yes	17.7%			
10. STUDY TEAM	No. of Members 14 Period Feb.1981 - Feb.1982 (13 months)  Total M/M 57.09 Japan 21.57 Field 35.32	Conditions and Development Impacts: Conditions: 1. Water resource development will be conducted by the construction of Mae Kuang dam to increase the land use and agricultural production. 2. It will give employment opportunities to farmers around the district. 3. Infrastructure for agricultural production and organization to disseminate agricultural technology will be completed to stabilize agricultural production and improve living environment in the rural area.				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHNICAL TRANSFER	1. Acceptance of one trainee 2. Several seminars held in RID during the period of the survey			
12. EXPENDITURE	Total 193,441 (¥000) Contracted 165,175					
			2. MAJOR REASONS FOR PRESENT STATUS			
			3. PRINCIPAL SOURCES OF INFORMATION			
			①			

和名 メイクワンかんがい農業開発計画

{F/S, (M/P)+F/S, D/D}

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT		
1. COUNTRY	Thailand	1. SITE OR AREA	Upper Pasak river basin under PHETCHABON Province (about 330km north from Bangkok)			1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled	
2. NAME OF STUDY	Upper Pasak Medium Scale Irrigation Project	2. PROJECT COSTS	US\$1=23B					
3. SECTOR	Agriculture/ General		Total Cost	Local Cost	Foreign Cost	(Description)  The Royal Irrigation Development has implemented the project works by his own fund on the basis of the result of the Feasibility Study undertaken by JICA Study Team		
4. REFERENCE NO.			1) 195,000	107,000	88,000			
5. TYPE OF STUDY	F/S		2)					
6. COUNTERPART AGENCY	Royal Irrigation Department, Ministry of Agriculture and Cooperatives	3. CONTENTS OF MAJOR PROJECT(S)	3)					
7. OBJECTIVES OF STUDY	Feasibility Study -to identify the order of priority -to formulate an irrigated agricultural development project and identify the feasibility of the project	Sub-Project						
8. DATE OF S/W	Apr. 1981	Huai Saduang Yai	Huai Khon Kaen	Huai Yai	K.Chaliang Lah			
9. CONSULTANT(S)	Nippon Koei Co., Ltd. Chuo Kaihatsu Corporation	1. Irrigation Area (ha)	5,400	5,100	1,800			1,200
10. STUDY TEAM	No. of Members 34 Period Aug. 1981 - Mar. 1983 (20 months)	2. Dam 1) Type	Earthfil	Earthfil	Earthfil			Earthfil
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Total M/M 72.48 Japan 21.06 Field 51.42	2) Height (m)	38	57	38			35.3
12. EXPENDITURE	Total 188,810 (¥000) Contracted 175,942	3) Crest Length (m)	467	950	816			1,259
		3. Irrigation Canal (km)	-	105.2	26.6	21.2		
		4. Drainage Canal	-	72.3	36.7	20.0		
		Implementation Period:	10 years			2. MAJOR REASONS FOR PRESENT STATUS		
		4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		3. PRINCIPAL SOURCES OF INFORMATION		
			13.9%					
		Feasibility: Yes						
		Conditions and Development Impacts:				①		
		Condition: Agricultural benefit is estimated as a difference of both benefits accrued under with and without conditions. In addition, irrigation water supply to lower basin and drinking water supply to the Lom Sak municipality are assessed as a direct benefit from the project.						
		Development Impacts: 1) Increase of agricultural production 2) Rasing of the living standard of the regional inhabitants 3) Supplemental water supply to urban area						

和名 パサック河上流中規模灌漑計画

(F/S, (M/P)+F/S, D/D)

## PROJECT SUMMARY (D/D)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	The Rama VI bridge and neighboring areas, northern Bangkok			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Discontinued or Cancelled <input type="checkbox"/> Processing
2. NAME OF STUDY	Rama VI Bridge Rehabilitation Project	2. PROJECT COSTS	(US\$1=26 Bahts)			
3. SECTOR	Transportation/ Railway		Total Cost	Local Cost	Foreign Cost	(Description)  Short-term plan * Completed with domestic funds --- the purpose of the project was tentatively attained. * Repair work on bridge piers and shoe resetting were implemented and the restriction on train speed lifted.  Long-term plan * Double-tracking has not yet started due to its relation with a new road bridge. However, it seems that the State Railway of Thailand has started to make budgetary arrangements to repair the Rama VI Bridge and double-track it, in order to implement the double-tracking after construction of the New Rama Bridge that is now under way.
4. REFERENCE NO.			1) 1,353	1,353		
5. TYPE OF STUDY	D/D		2) 142			
6. COUNTERPART AGENCY	State Railway of Thailand	3. CONTENTS OF MAJOR PROJECT(S)	3)			
7. OBJECTIVES OF STUDY	D/D and cost estimation, etc., for preparing bidding documents on the rehabilitation of the Rama VI bridge, which was in danger of collapse	(1) Survey to confirm present status riverbed scouring; Geological survey; Vibration survey (2) Analysis of causes of deformation (3) Study on repair policies (4) Basic design (5) Study on construction methods (6) Approximate calculation of costs (7) Detailed design (8) Preparation of calculation sheets for work execution (9) Cost estimation (10) Preparation of specifications cost 1) above is for bridge piers and cost 2) for shoe resetting				
8. DATE OF S/W	Mar. 1981	Implementation Period:	1) 10 months			
9. CONSULTANT(S)	Japan Railway Technical Service	4. FEASIBILITY AND ITS ASSUMPTIONS	2) 3 months	EIRR	FIRR	
10. STUDY TEAM	No. of Members 18 Period Jan. 1982 - Dec. 1982 (11 months)  Total M/M 46.54 Japan 35.50 Field 11.04	Feasibility:				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	-Survey by divers -Vibration survey -Excavation survey on bridge piers -Riverbed survey (by ship)	Conditions and Development Impacts: In the short term, the current restrictions on large rolling stock and train speed are to be continued. In the long term, such measures as the repairing of bridge piers and shoe resetting are to be implemented.				
12. EXPENDITURE	Total 87,560 (¥000) Contracted 81,093	5. TECHNICAL TRANSFER				
		1) OJT and JICA training program for counterparts 2) Employment of local consultants				
					2. MAJOR REASONS FOR PRESENT STATUS	
					3. PRINCIPAL SOURCES OF INFORMATION	
					①	

和名 ラマ6世橋梁修復計画

(F/S, (M/P)+F/S, D/D)

**PROJECT SUMMARY (D/D)**

ASE THA/S 404/82

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Eastern Coastal Zone of Thailand between Dok Krai and Mab Ta Pud			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Dok Krai - Mab Ta Pud Water Pipe Line Project in the East Coast Area	2. PROJECT COSTS	(US\$1=230Yen=23B) Total Cost      Local Cost      Foreign Cost 1)                      39,214                      13,026                      26,188 (US\$1,000)      2)                      3)                      3)			
3. SECTOR	Social Infrastructures/ Water Resource Development	3. CONTENTS OF MAJOR PROJECT(S)	Nong Pla Lai Dam:                      200MCM Pipeline:                                      27.6 km Irrigation Water Drainage System:      3,650 ha			(Description)  Date of completion of detail design:                      Sep. 1982 Date of conclusion of L/A of the requested loan granted by the Japanese Government (320 million yen):                      Jul. 1982 Date of completion:    Jun. 1984 Date of commencement of service:                                      Sep. 1983
4. REFERENCE NO.		Implementation Period:	Mar. 1983 - Aug. 1984			
5. TYPE OF STUDY	D/D	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
6. COUNTERPART AGENCY	Royal Irrigation Department (RID)	Feasibility:	Yes			
7. OBJECTIVES OF STUDY	Executive design for construction of pipeline between Dok Krai reservoir and Mab Ta Pud	Conditions and Development Impacts:	After deducting tax, insurance subsidy and indemnity from the construction cost reckoned on the preliminary design as the basis. Regional development of the eastern coastal zone is anticipated by the supply of municipal, industrial and irrigation water.			
8. DATE OF S/W	Oct. 1980	5. TECHNICAL TRANSFER	OJT and JICA training program for counterparts			
9. CONSULTANT(S)	CTI Engineering Co., Ltd. Sanyu Consultants Inc.	12. EXPENDITURE	Total		223,594 (¥'000)	
10. STUDY TEAM	No. of Members      22 Period                      Nov. 1981 - Aug. 1982 (10 months)  Total M/M                      87.0 Japan                              39.0 Field                                48.0		Contracted		206,221	
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Survey Geological Survey	2. MAJOR REASONS FOR PRESENT STATUS	(1) High degree of priority: The industrialization of the east coast region was the No.1 priority project of the Government of Thailand (2) RID was directly commissioned by the Prime Minister to pushing forward of the project			
		3. PRINCIPAL SOURCES OF INFORMATION	①			

和名 東部海岸パイプライン建設実施設計

{F/S, (M/P)+F/S, D/D}

PROJECT SUMMARY (Basic Study)

ASE THA/S 501/82

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	Two camps for Laotian refugees in the northeastern part of Thailand			1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Water Supply Project to Laotian Displaced Persons: Nakhon Phanom Camp and Pak Chom Camp	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	Total Cost	Local Cost	Foreign Cost	
3. SECTOR	Social Infrastructures/ Water Resource Development	3. MAJOR PROJECT(S) PROPOSED	1) (US\$1,000) 2) 1st phase study: Underground water survey at Nakhon Phanom Camp (test boring at 4 sites and identification of 2 sites for tube wells) 2nd phase study: Underground water survey at Pak Chom Camp (test boring at 4 sites and identification of 2 sites for tube wells)			(Description)  After the completion of the study, the proposed tube wells were constructed by the Japanese grant aid.
4. REFERENCE NO.						
5. TYPE OF STUDY	Basic Study					
6. COUNTERPART AGENCY	Ministry of Interior					
7. OBJECTIVES OF STUDY	Survey of underground water resources					
8. DATE OF S/W		4. CONDITIONS AND DEVELOPMENT IMPACTS				
9. CONSULTANT(S)	Japan Engineering Consultants, Inc.	The project will supply potable water for Laotian refugees (20,000 persons at Nakhon Phanom and 50,000 persons at Pak Chom).				
10. STUDY TEAM	No. of Members 8 Period Feb.1982 - Nov.1982 (10 months)  Total M/M 36.66 Japan 2.96 Field 33.70					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY						
12. EXPENDITURE	Total 100,465 (¥'000) Contracted 98,916	5. TECHINICAL TRANSFER				
					2. MAJOR REASONS FOR PRESENT STATUS	
					3. PRINCIPAL SOURCES OF INFORMATION	
					①	

和名 ラオス難民生活用水供給計画

(M/P, M/P+(F/S), Basic Study, Other)

PROJECT SUMMARY (M/P)

ASE THA/S 102/83

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF USE OF STUDY RESULTS		
1. COUNTRY	Thailand	1. SITE OR AREA	16 changwats of the Northeastern Region (169,000 sq. km)			1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued	
2. NAME OF STUDY	Road Development in the Northeastern Region	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	(US\$1=23B) Total Cost    Local Cost    Foreign Cost				
3. SECTOR	Transportation/ Road	(US\$1,000)	1) 55,200			(Description) Based on the recommendations of the study, a feasibility study was subsequently undertaken on 15 routes for new construction and improvement (502.1km) and 8 routes for rehabilitation (90km).	
4. REFERENCE NO.		3. MAJOR PROJECT(S) PROPOSED					
5. TYPE OF STUDY	M/P	The study proposed the following priority projects. - New construction and improvement 18 routes (666.9km) - Rehabilitation 25 routes (468.0km)					
6. COUNTERPART AGENCY	Dept. of Highways, Ministry of Communications						
7. OBJECTIVES OF STUDY	Formulation of a master plan for road development in the Northeastern Region						
8. DATE OF S/W	Nov. 1981	4. CONDITIONS AND DEVELOPMENT IMPACTS					
9. CONSULTANT(S)	Nippon Koei Co., Ltd. and Katahira & Engineers International	Development impacts: 1) Narrowing of regional disparities 2) Stimulation of agricultural production 3) Development in poorer areas Social impacts: 1) Alleviation of social and political isolation 2) Improvement of health services 3) Improvement of education 4) Reduction of income disparities					
10. STUDY TEAM	No. of Members 11 Period Mar. 1982 - Mar. 1983 (12 months)  Total M/M 79.2 Japan 14.6 Field 64.6						2. MAJOR REASONS FOR PRESENT STATUS
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHNICAL TRANSFER					3. PRINCIPAL SOURCES OF INFORMATION
12. EXPENDITURE	Total 224,974 (¥'000) Contracted 216,437	1) OJT of the methods for selecting priority roads and for measuring social impacts 2) Participation of 2 counterparts in the JICA training program					①

和名 東北部道路網整備建設計画

{M/P, M/P+(F/S), Basic Study, Other}

## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	Coastal area, Layon Province			1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Development Project of the Industrial Port on the Eastern Seaboard	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	(US\$1=240Yen) Total Cost    Local Cost    Foreign Cost (US\$1,000)    1)    888,220    570,800    56,560 2)			
3. SECTOR	Transportation/ Port	3. MAJOR PROJECT(S) PROPOSED	Development of Layon Province, Composed of Industrial Base, Port, Residential Area.  Master Plan (year 2000): Industrial development    Gas separation plant, Soda Ash complex, etc Port Development    45 berths, Break water Urban Plan    New Town 575 ha Population = 71,500 Relevant Infrastructure    Road, Railway, Water Supply Sewerage, Waste treatment, etc.  Short Term Development: (1) Soda Ash Fertilizer, Petro Chemical (2) 13 berths (3) New Town 131 ha			(Description) It has been included in the national development plan. Now it is at Detailed Design Phase.
4. REFERENCE NO.		4. CONDITIONS AND DEVELOPMENT IMPACTS	To promote the Heavy industry at Eastern Seaboard Development and contribute to the economic growth of the nation and employment.			
5. TYPE OF STUDY	M/P+(F/S)	5. TECHNICAL TRANSFER	Giving lecture on methods for Planning Ports and Industrial estates.			
6. COUNTERPART AGENCY	Industrial Estate Authority of Thailand, Port Authority of Thailand					
7. OBJECTIVES OF STUDY	Development of Eastern Seaboard utilizing natural gas					
8. DATE OF S/W	May 1982					
9. CONSULTANT(S)	Overseas Coastal Area Development Institute of Japan Kokusai Kogyo Co., Ltd.					
10. STUDY TEAM	No. of Members    9 Period    Jul.1982 - Nov.1983 (17 months)  Total M/M    65.31 Japan    36.6 Field    28.71					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Geological survey					
12. EXPENDITURE	Total    412,019 (¥'000) Contracted    411,680					
		2. MAJOR REASONS FOR PRESENT STATUS				
		3. PRINCIPAL SOURCES OF INFORMATION	①			



## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Coastal Area, Layon Province		1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Development Project of the Industrial Port on the Eastern Seaboard	2. PROJECT COSTS	(US\$1=239.2Yen) Total Cost Local Cost Foreign Cost 1) 1,808,940 668,491 (US\$1,000) 2) 3)		
3. SECTOR	Transportation/ Port	3. CONTENTS OF MAJOR PROJECT(S)	Urgent Plan: Project Components Scale of development Industrial Estate Area 410 ha, Quay wall 820 m Public Port area Quay Wall 850m, wharf 280 m Breakwater 3,000 m Urban Area Area 157 ha Railway 23.6 km 1) Industrial Port 2) Industrial Estate		(Description) Sep.1983 OECF E/S loan (1,720 million yen) Sep.1984 OECF loan on Maptaput Industrial Port (5,610 million yen) Oct.1985 OECF loan on Maptaput Industrial Port (16,050 million yen) and Industrial Estate (3,207 million yen) Oct.1985 D/D on Maptaput Port completed Jan.1986 D/D on Industrial Estate completed Dec.1987 Construction of the Industrial Estate commenced Nov.1988 OECF loan on Satahip-Maptaput Railway (3,002 million yen)
4. REFERENCE NO.		Implementation Period:	Jan.1984 - Dec.1987		2. MAJOR REASONS FOR PRESENT STATUS  (1) To formulate the core of development. (2) High priority in Thailand National Plan
5. TYPE OF STUDY	(M/P)+F/S	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR FIRR 15.7% Feasibility: Yes 1) 4.48% 2) 19.82%		
6. COUNTERPART AGENCY	Industrial Estate Authority of Thailand, Port Authority of Thailand	Conditions and Development Impacts:	Conditions of Cargo Forecast: 1986 GDP = 4,350 A Bahts 2000 GDP = 11,200 A Bahts Conditions of Industrial Development: GNP Growth (1981 - 1986) 6.6% per annum Manufacturing sector growth 7.6% per annum Export oriented Industry 15.0% per annum The effect: To be the core of Heavy industrial development in Eastern Seaboard Development Plan.		3. PRINCIPAL SOURCES OF INFORMATION  ①
7. OBJECTIVES OF STUDY	Establishing the Master Plan for Maptaput Port as an Industrial Port.	5. TECHNICAL TRANSFER	Giving lecture on methods for Planning Ports and Industrial Estates		
8. DATE OF S/W	May 1982	10. STUDY TEAM	No. of Members 9 Period Jul.1982 - Nov.1983 (17 months)  Total M/M 65.31 Japan 36.6 Field 28.71		
9. CONSULTANT(S)	Overseas Coastal Area Development Institute of Japan Kokusai Kogyo Co., Ltd.	11. ASSOCIATED AND/OR SUBCONTRACTED STUDY			
12. EXPENDITURE	Total 412,019 (¥'000) Contracted 411,680				

PROJECT SUMMARY (F/S)

ASE THA/S 311/83

Compiled March 1986  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Chonburi			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Nong Kho - Lam Chabang Water Pipeline Project	2. PROJECT COSTS	(US\$1=230Yen=23B) Total Cost Local Cost Foreign Cost 1) 16,300 7,100 (US\$1,000) 2) 3)			
3. SECTOR	Public Utilities/ Water Supply	3. CONTENTS OF MAJOR PROJECT(S)	Pipeline (metal pipe, diameter 1,000mm, 14.4km)			(Description)  1984 Sep. OECF E/S loan agreement (144 million yen) 1985 Oct. OECF loan agreement (1,363 million yen) 1987 May Construction commenced 1988 Dec. Construction completed
4. REFERENCE NO.		Implementation Period:	1987 - 1988			
5. TYPE OF STUDY	F/S	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
6. COUNTERPART AGENCY	Public Works Dept., Ministry of Interior	Feasibility:	11.6%	9.6%		
7. OBJECTIVES OF STUDY		Conditions and Development Impacts:	The demand for water was projected for 1995 and 2001. The existing reservoir will not be able to satisfy the projected demand, and water must be conveyed by the pipeline from outside the area. The project is indispensable for the industrial and urban development in the area.			2. MAJOR REASONS FOR PRESENT STATUS 1) Large impact: the industrial development at the Lam Chabang area is dependent on this project. 2) Close linkage with other projects: development in Lam Chabang and the source of water 3) High priority 4) Strength of the executing agency: strong support by NESDB
8. DATE OF S/W	Jul. 1983	10. STUDY TEAM	No. of Members 7 Period Aug. 1983 - Mar. 1984 (7 months)  Total M/M 31.00 Japan 13.33 Field 17.67			
9. CONSULTANT(S)	Nippon Koei Co., Ltd. and Nikken Consultants, Inc.	11. ASSOCIATED AND/OR SUBCONTRACTED STUDY				3. PRINCIPAL SOURCES OF INFORMATION ①
12. EXPENDITURE	Total 75,218 (¥'000) Contracted 78,467	5. TECHINICAL TRANSFER	1) On-the-job training during the study 2) Acceptance of counterparts for the training in Japan			

和名 ノンコー・ラムチャバン送水パイプライン計画

(F/S, (M/P)+F/S, D/D)

**PROJECT SUMMARY (F/S)**

ASE THA/S 312/83

Compiled March 1986  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Greater Bangkok			1. PRESENT STATUS <input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Second Stage Expressway System in the Greater Bangkok	2. PROJECT COSTS	(US\$1=260Yen)			
3. SECTOR	Transportation/ Road		Total Cost	Local Cost	Foreign Cost	(Description)  D/D of the Second Expressway was undertaken by a consortium of 5 consulting firms.  In September 1988, ETA decided to implement the project with the private sector investment and the contract was granted to the Bangkok Expressway Consortium in December of the same year. ETA allowed one year for the acquisition of right of way.
4. REFERENCE NO.		(US\$1,000)	1) 645,800	391,200		
5. TYPE OF STUDY	F/S		2)			
6. COUNTERPART AGENCY	Expressway and Rapid Transit Authority(ETA)	3. CONTENTS OF MAJOR PROJECT(S)	3)			
7. OBJECTIVES OF STUDY	Road planning		-North-South Route running from chaeng Wattana to an interchange at Bang Khlo -West-East Route running from an interchange at Phaya Thai to Sri Nakaim Road -Toll elevated expressway (Total length: 31.8km)			
8. DATE OF S/W	Mar.1982	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
9. CONSULTANT(S)	Pacific Consultants International		17.0%	12.0%		
10. STUDY TEAM	No. of Members 16 Period May 1982 - Nov.1983 (18 months)  Total M/M 60.17 Japan 8.66 Field 51.51	Feasibility: Yes	Conditions and Development Impacts: Condition: Future traffic volume was forecasted for the targetted year 1990,2000,2010 on the basis of O-D survey made by home interviews. Development Impact: Traffic congestion in the city is expected to be alleviated.			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic survey Geological survey Traffic survey	5. TECHINCAL TRANSFER	(1) Overseas training for 2 counterpart staff (2) Employment of local consultants for topographic and geological survey			
12. EXPENDITURE	Total 260,230 (¥'000) Contracted 250,242					
		2. MAJOR REASONS FOR PRESENT STATUS				
		(1) Effectiveness: Speeding up of vehicles (2) Priority: Traffic volume of the First Stage exceeded the anticipated figure; therefore, toll revenue will increase and priority of Second Stage is high. (3) Strong support to promote this project				
		3. PRINCIPAL SOURCES OF INFORMATION				
		①				

和名 バンコック高速道路建設計画

[F/S, (M/P)+F/S, D/D]

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT																					
1. COUNTRY	Thailand	1. SITE OR AREA	Eastern seaboard (Rayong and Chonburi changwats)																						
2. NAME OF STUDY	East Coast Water Resources Development (Phase II)	2. PROJECT COSTS	(US\$1=23Bahts)																						
3. SECTOR	Social Infrastructures/ Water Resource Development		Total Cost	Local Cost	Foreign Cost																				
4. REFERENCE NO.			1) 198,260		82,608																				
5. TYPE OF STUDY	F/S		2) 329,565		134,782																				
6. COUNTERPART AGENCY	Royal Irrigation and Drainage Dept.		3) 69,130		17,391																				
7. OBJECTIVES OF STUDY	Feasibility analysis of three dams	3. CONTENTS OF MAJOR PROJECT(S)	1) Klong Luan: (a) Multi-purpose dam (h.425.m); (b) canal connecting the dam and Chonburi; (c) irrigation and drainage (6,600ha) 2) Klong Yay: (a) Multi-purpose dam (h.42.5m); (b) canal connecting Nong Pla Lai Dam and Nong Kho Dam; (c) irrigation and drainage (7,700ha) 3) Klong Tap Mah: (a) Multi-purpose dam (h. 28.9m); (b) irrigation and drainage																						
8. DATE OF S/W	Feb.1982	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR																					
9. CONSULTANT(S)	Nippon Koei Co., Ltd. and Nikken Consultants, Inc.	Feasibility: Yes	1) 16.1%	2) 15.0%	3) 12.1%																				
10. STUDY TEAM	No. of Members 12 Period Jul.1982 - Mar.1983 (9 months)  Total M/M Japan Field	Conditions and Development Impacts: Benefits of the projects are estimated as follows.	(Unit: million Bahts) <table border="1"> <thead> <tr> <th></th> <th>Water Demand</th> <th>Agri. Dev.</th> <th>Flood Control</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>423.3</td> <td>180.7</td> <td>49.8</td> <td>653.8</td> </tr> <tr> <td>2)</td> <td>793.6</td> <td>198.2</td> <td>57.2</td> <td>1,049.0</td> </tr> <tr> <td>3)</td> <td>-</td> <td>81.7</td> <td>19.5</td> <td>101.0</td> </tr> </tbody> </table>				Water Demand	Agri. Dev.	Flood Control	Total	1)	423.3	180.7	49.8	653.8	2)	793.6	198.2	57.2	1,049.0	3)	-	81.7	19.5	101.0
	Water Demand	Agri. Dev.	Flood Control	Total																					
1)	423.3	180.7	49.8	653.8																					
2)	793.6	198.2	57.2	1,049.0																					
3)	-	81.7	19.5	101.0																					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHINCAL TRANSFER																							
12. EXPENDITURE	Total 184,263 (¥000) Contracted 173,923																								
		1. PRESENT STATUS		<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input checked="" type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled																					
		3. CONTENTS OF MAJOR PROJECT(S)		(Description) - (b) of 2): OECF E/S loan agreement in Feb. 1990 (204 million yen) - 1) and 3): Suspended after the completion of the F/S.																					
		Implementation Period: 1984 - 1996																							
		2. MAJOR REASONS FOR PRESENT STATUS																							
		3. PRINCIPAL SOURCES OF INFORMATION		①																					

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT																
1. COUNTRY	Thailand	1. SITE OR AREA	Northern part of Thailand, Mae Chang River Basin			1. PRESENT STATUS <input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input checked="" type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled															
2. NAME OF STUDY	Mae Chang Irrigation Project	2. PROJECT COSTS	<table border="1"> <thead> <tr> <th></th> <th>Total Cost</th> <th>Local Cost</th> <th>Foreign Cost</th> </tr> </thead> <tbody> <tr> <td>1) (US\$1,000)</td> <td>44,000</td> <td>22,000</td> <td>22,000</td> </tr> <tr> <td>2)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					Total Cost	Local Cost	Foreign Cost	1) (US\$1,000)	44,000	22,000	22,000	2)				3)		
	Total Cost	Local Cost	Foreign Cost																		
1) (US\$1,000)	44,000	22,000	22,000																		
2)																					
3)																					
3. SECTOR	Agriculture/ General	3. CONTENTS OF MAJOR PROJECT(S)	Irrigation canal for new water resource development through construction of reservoir dam and diversion dam (main canal 51.3km, tributary canal 93.3km)			(Description)  The project has been suspended because of the change in agricultural policy of Thai Government.															
4. REFERENCE NO.		Implementation Period:	Apr.1984 - Apr.1992																		
5. TYPE OF STUDY	F/S	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR																	
6. COUNTERPART AGENCY	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	Feasibility:	13.6%																		
7. OBJECTIVES OF STUDY	Feasibility study of the irrigation plan in Mae Chang area through the construction of a water storage dam	Conditions and Development Impacts:	Productivity of agriculture will be increased by water resource development through dam. It will also increase all-year employment opportunities, and stabilize agricultural production through improvement of living environment, which will heighten farmers' living standard in project site and surrounding areas.																		
8. DATE OF S/W	Nov.1982	5. TECHINCAL TRANSFER	To Thai counterparts assigned through the survey																		
9. CONSULTANT(S)	Sanyu Consultants Inc Taiyo Consultants Co.,Ltd.	10. STUDY TEAM	<table border="1"> <thead> <tr> <th>No. of Members</th> <th>13</th> </tr> </thead> <tbody> <tr> <td>Period</td> <td>Jan.1983 - Jan.1984 (13 months)</td> </tr> <tr> <td>Total M/M</td> <td>69.11</td> </tr> <tr> <td>Japan</td> <td>34.81</td> </tr> <tr> <td>Field</td> <td>34.30</td> </tr> </tbody> </table>				No. of Members	13	Period	Jan.1983 - Jan.1984 (13 months)	Total M/M	69.11	Japan	34.81	Field	34.30					
No. of Members	13																				
Period	Jan.1983 - Jan.1984 (13 months)																				
Total M/M	69.11																				
Japan	34.81																				
Field	34.30																				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		12. EXPENDITURE	<table border="1"> <thead> <tr> <th>Total</th> <th>186,107 (¥'000)</th> </tr> </thead> <tbody> <tr> <td>Contracted</td> <td>141,808</td> </tr> </tbody> </table>			Total	186,107 (¥'000)	Contracted	141,808												
Total	186,107 (¥'000)																				
Contracted	141,808																				
		2. MAJOR REASONS FOR PRESENT STATUS	Countermeasure to 25 families which will be sunk in water in the River Basin.																		
		3. PRINCIPAL SOURCES OF INFORMATION	①																		

和名 メチャンかんがい農業開発計画

(F/S, (MP)+F/S, D/D)

## PROJECT SUMMARY (M/P)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	Upper part of the Southern Region (pop.1.1 million)		
2. NAME OF STUDY	Sub-Regional Development of the Upper Southern Part	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	(US\$1=23Bahts)		
3. SECTOR	Development Plan/ Integrated Regional Development Plan		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.			(US\$1,000)	1) 1,055,304	2)
5. TYPE OF STUDY	M/P	3. MAJOR PROJECT(S) PROPOSED	The study proposed 10 high priority projects at the total cost of 24,272 million baht.		
6. COUNTERPART AGENCY	National Economic and Social Development Board (NESDB)		1) Surat Thani Industrial Estate 2) Phuket Airport Industrial Estate and Export Processing Zone 3) East-West Link 4) Surat Thani International Port (Khanom Deep-sea Port) 5) Krabi Oil Refinery and Pipeline 6) Phuket Urban Development 7) Surat Thani Urban Development 8) Central Lowland Development 9) Tapi-Phum Duang River Management 10) Phuket Water Supply		
7. OBJECTIVES OF STUDY	Formulation of a regional development plan through 2000		Note: The cost shown above pertains to the ten high priority projects.		
8. DATE OF S/W	Nov. 1982	4. CONDITIONS AND DEVELOPMENT IMPACTS	Development impacts: 1) Lessening of the concentration of economic activities in Greater Bangkok and more decentralized economic growth 2) Agricultural development (agricultural land development of unutilized or underutilized land and an increase of agricultural exports) 3) Industrial development (Sophistication of processing industries) 4) Tourism development (beach resorts, etc.) 5) Energy development (hydro-power, thermal power (coal), refining of Middle East petroleum) 6) Development of two urban cores (Surat Thani and Phuket)		
9. CONSULTANT(S)	International Development Center of Japan, and Pacific Consultants International	5. TECHNICAL TRANSFER	1) Participation of counterparts in the JICA training program 2) OJT for the counterparts through joint work		
10. STUDY TEAM	No. of Members 26 Period Mar.1983 - Mar.1985 (24 months)  Total M/M 157.1 Japan 20.7 Field 136.4	3. PRINCIPAL SOURCES OF INFORMATION	①		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		2. MAJOR REASONS FOR PRESENT STATUS			
12. EXPENDITURE	Total 431,827 (Y'000) Contracted 416,274	1. PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued		
		(Description)	1) After the completion of the study, ADB reviewed 10 high priority projects and endorsed their validity. 2) The Southern Seaboard Development Committee (chaired by the Prime Minister) was established in 1989. Under the purview of this Committee, a study on the development of Southern Thailand is being implemented, including the East-West Link, the Krabi Oil Refinery and Pipeline, and the Khanom Deep-sea Port, with World Bank finance. 3) With JICA technical assistance, the Tourism Authority of Thailand implemented a master plan study on tourism in Southern Thailand (1988). 4) With JICA technical assistance, the Dept. of Highways of the Ministry of Communications is implementing a master plan study on the road network (the East-West Link) in Southern Thailand. 5) The Electricity Generating Authority of Thailand is making preparations for a study on the Kaen Krung Dam proposed as part of the Tapi-Phum Duang River Management, but the problem of relocation is yet unsolved. 6) Unilever and other private enterprises have been active in the Central Lowland Development.		

和名 南タイ北部地域総合開発計画

(M/P, M/P+(F/S), Basic Study, Other)









## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	the entire coastal areas		
2. NAME OF STUDY	Comprehensive Development of Coastal Shipping	2. PROJECT COSTS	(US\$1=251.1yen)		
3. SECTOR	Transportation/ Marine Transportation & Ships		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.			1) 528	516	
5. TYPE OF STUDY	F/S		2)		
6. COUNTERPART AGENCY	Office of the Mercantile Marine Promotion Commission, Ministry of Communications	3. CONTENTS OF MAJOR PROJECT(S)	3)		
7. OBJECTIVES OF STUDY	Formulation of a comprehensive development plan for the coastal shipping and regional ports	1) Present status of physical distribution and selection of major commodities for domestic shipping			
8. DATE OF S/W	Feb. 1983	2) Present status of the domestic shipping industry			
9. CONSULTANT(S)	Maritime International Cooperation Center of Japan, and Overseas Coastal Area Development Institute of Japan	3) Cargo throughputs and present facilities of regional ports			
10. STUDY TEAM	No. of Members 11 Period Jul. 1983 - Oct. 1984 (16 months)	4) Present freight movements by transportation mode and the possibility of transfer from other modes to domestic shipping			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Total M/M 39.5 Japan 37.5 Field 2.0	5) Formulation of a development plan for the domestic shipping industry and regional ports			
12. EXPENDITURE	Total 219,015 (¥000) Contracted 88,824	6) Economic and financial analysis of the operations of domestic shipping and regional ports			
		Implementation Period: Jul. 1983 - Oct. 1984			
		4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR	
		Feasibility: No	19.7%		
		Conditions and Development Impacts:			
		1) For the shuttle service between Bangkok and Songkhla, a fleet of 7 general cargo boats (700 tons) will be suitable.			
		2) Institutional measures for domestic shipping: Legislation of the domestic shipping act; clear separation between international and domestic shipping; establishment of the ship registry; introduction of the permit system on ship construction; submission of the operation reports			
		3) Measures for promoting domestic shipping: Preferential treatment by the Investment Promotion Act; Fiscal incentives; simplification of freight documents and improvement of customs procedures; establishment of the institutional finance to give soft long-term loans			
		5. TECHINCAL TRANSFER			
		1) OJT on the operation of domestic shipping and ports			
		2) Participation of the counterparts in the JICA training program			
			1. PRESENT STATUS		
			<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Implementing <input type="radio"/> Processing <input checked="" type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled		
			(Description)		
			Suspended after the completion of the study.		
			A short-term expert (2 months) was sent in 1985 and 1986 to give advice on the legislation on domestic shipping and its promotion.		
			The project requires the government finance, and the implementation was suspended because some legislative improvement is necessary for reviewing the operation of domestic shipping companies.		
			2. MAJOR REASONS FOR PRESENT STATUS		
			1) Change of priority 2) Problem of demand: difficulty of providing transportation service with profit		
			3. PRINCIPAL SOURCES OF INFORMATION		
			①		

和名 沿岸海運整備振興計画

{F/S, (M/P)+F/S, D/D}



## PROJECT SUMMARY (Other)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF USE OF STUDY RESULTS		
1. COUNTRY	Thailand	1. SITE OR AREA	Entire country			1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued	
2. NAME OF STUDY	Traffic Safety Plan for Roads	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	Total Cost	Local Cost	Foreign Cost		
3. SECTOR	Transportation/ General	(US\$1,000)	1)	2)		(Description) Utilizing the guidelines and other suggestions of the study, the Dept. of Highways have been installing necessary traffic-safety facilities.	
4. REFERENCE NO.		3. MAJOR PROJECT(S) PROPOSED					
5. TYPE OF STUDY	Other	In order to promote traffic safety in road transport, the study conducted (1) collection and analysis of road traffic data, (2) identification of high-risk areas, (3) guidelines of physical facilities, (4) planning of physical facilities, and (5) medium- and long-term plan for installing physical facilities.					
6. COUNTERPART AGENCY	Dept. of Highways, Ministry of Communications	4. CONDITIONS AND DEVELOPMENT IMPACTS					
7. OBJECTIVES OF STUDY		The effect of technical transfer is much larger than the direct effect of the project. Since in this project, 1) collection and analysis of data, 2) distinction of danger zones, 3) suggestion for traffic control system, and 4) projects for establishment of traffic control system are suggested.					
8. DATE OF S/W	Feb. 1983	5. TECHNICAL TRANSFER					
9. CONSULTANT(S)	International Engineering Consultants Association, Central Consultant, Inc., Chodai Co., Pacific Consultants International, and NSE International	1) Participation of the counterparts in the JICA training program 2) Gift of equipment (2 micro-computers)					
10. STUDY TEAM	No. of Members 11 Period May 1983 - Dec. 1984 (19 months)  Total M/M 54.5 Japan 10.5 Field 44.0	3. PRINCIPAL SOURCES OF INFORMATION					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		①					
12. EXPENDITURE	Total 332,824 (¥'000) Contracted 142,810	2. MAJOR REASONS FOR PRESENT STATUS					

和名 道路交通安全計画

{M/P, M/P+(F/S), Basic Study, Other}



## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	East suburban area of Bangkok		
2. NAME OF STUDY	Flood Protection/Drainage Project in Eastern Suburban - Bangkok	2. PROJECT COSTS	(US\$1= 27 Bahts)		
3. SECTOR	Social Infrastructures/ River & Erosion Control		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.			1) 98,333	51,630	46,703
5. TYPE OF STUDY	(M/P)+F/S	3. CONTENTS OF MAJOR PROJECT(S)			
6. COUNTERPART AGENCY	Dept. of Drainage and Sewerage, Bangkok Metropolitan Administration	Facilities	Scale		
7. OBJECTIVES OF STUDY	To evaluate the feasibility of building the drainage facilities	Dyke (Barrier)	5.1 km		
8. DATE OF S/W	Nov. 1982	Sluice gate	4 places		
9. CONSULTANT(S)	Pacific Consultants International Tokyo Engineering Consultants	Pumping Station	5 stations (36 cu.m/s)		
10. STUDY TEAM	No. of Members 12 Period May 1983 - Feb. 1986 (32 months)	Klong improvement	93 km		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Geological survey	Main drain improvement	4.3 km		
12. EXPENDITURE	Total 487,871 (¥000) Contracted 331,729	Flood control operation center	1 set		
		4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR	
		Feasibility: Yes	20.2%		
		Conditions and Development Impacts:	Drainage facilities are to be improved based on the result of floods which occurred in 1983. It used to take 2 or 3 months to recover. But now it takes only 3 days to 1 week. The development impact is great.		
		5. TECHNICAL TRANSFER	Technical advice on flood control operation, drainage facilities management/operation. Overseas training for counterpart staff.		
		1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Discontinued or Cancelled <input type="checkbox"/> Processing		
		(Description)	After the completion of F/S, the executing agency is working to see the implementation of the project. On the basis of the study, the following 2 projects are under way. (1) Project for improvement of quality of water (2) Construction of the Flood Control Operation Center with JICA grant. 59 pumps were also provided by Japanese grant.		
		2. MAJOR REASONS FOR PRESENT STATUS			
		3. PRINCIPAL SOURCES OF INFORMATION	①		

和名 バンコク市都市排水対策計画

(F/S, (M/P)+F/S, D/D)

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	10 towns and villages in the North-Eastern region of Thailand		
2. NAME OF STUDY	Sanitary District Water Works Project in the North-Eastern Region	2. PROJECT COSTS	(US\$1=27.0B)		
3. SECTOR	Public Utilities/ Water Supply		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.			1) 6,463.5	3,080	3,383.0
5. TYPE OF STUDY	F/S		2)		
6. COUNTERPART AGENCY	Department of Public Works, (DPW) Ministry of Interior	3. CONTENTS OF MAJOR PROJECT(S)	3)		
7. OBJECTIVES OF STUDY	Stable supply of clear water to the area.	Intake Facility	Water Filtration Facility 50 - 100 cu.m/h (Temporary Well, Coagulation Pond, Depositing Reservoir, Filter Bed, etc)		
8. DATE OF S/W	Jul.1984	Distribution Facility	Distribution Pond Max. Daily Capacity:6H Overhead Tanks Capacity : 2H Pumps Distribution Network		
9. CONSULTANT(S)	Sanyu Consultants Inc.	Implementation Period:	Oct.1986 - May 1989		
10. STUDY TEAM	No. of Members 5 Period Oct.1984 - Feb.1986 (16.5)  Total M/M 48.6 Japan 22.5 Field 26.1	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR	
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Feasibility: Yes		6-8%	
12. EXPENDITURE	Total 134,763 (¥000) Contracted 126,639	Conditions and Development Impacts: As preconditions, samples of F/S were conducted in 10 districts.	Development Impacts: Since the construction and development of the water works is to be conducted in the town where the provincial office is, the execution and benefit from this kind of project exerts much influence not only on the town but on surrounding districts.		
		5. TECHINCAL TRANSFER	Acceptance of 2 trainees from the local counterpart		
			1. PRESENT STATUS		
			<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Implementing <input type="radio"/> Processing <input checked="" type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled		
			(Description)		
			The project implementation for respective sanitary district may be commenced with their own budget sources.		
			2. MAJOR REASONS FOR PRESENT STATUS		
			The project is executed by the respective sanitary district organization.		
			3. PRINCIPAL SOURCES OF INFORMATION		
			①		

和名 東北タイ地方水道施設緊急整備計画

(F/S, (M/P)+F/S, D/D)

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Northeastern Region		
2. NAME OF STUDY	Road Development in the North - Eastern Region (Phase 2)	2. PROJECT COSTS	(US\$1=20B)		
3. SECTOR	Transportation/ Road		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.		(US\$1,000)	1) 600	160	
5. TYPE OF STUDY	F/S		2)		
6. COUNTERPART AGENCY	Dept. of Highways, Ministry of Communications	3)			
7. OBJECTIVES OF STUDY	Feasibility analysis of new construction, improvement and rehabilitation of roads	3. CONTENTS OF MAJOR PROJECT(S)	New construction and improvement 15 routes (502.1km)		
8. DATE OF S/W	Mar. 1984		Rehabilitation 8 routes (90km)		
9. CONSULTANT(S)	Katahira & Engineers International and Nippon Koei Co., Ltd.	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR	
10. STUDY TEAM	No. of Members 12 Period Jun. 1984 - Jul. 1985 (11 months)  Total M/M 57.56 Japan 5.00 Field 52.56	Feasibility: Yes	22.2-8.8%		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Conditions and Development Impacts:			
12. EXPENDITURE	Total 194,238 (¥000) Contracted 183,479	Direct effects: 1) Decrease of transportation costs to road users 2) Increase of value added of agricultural produce 3) Saving of road maintenance costs Social impacts: 1) Improved access to administrative services 2) Improvement of educational standards 3) Improvement of medical services 4) Narrowing of income disparities			
		5. TECHNICAL TRANSFER	1) OJT; 2) Participation of the counterparts in the JICA training program; 3) Employment of local consultants; 4) Gift of equipment and technical guidance		
			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled		
			(Description) 1988 Nov. OECF loan agreement (4,085 million yen), of which 1,008 million was for the construction and improvement of 7 routes (235.1km) of the Northeastern Region. 1990 Apr. Construction started The rest of new construction and improvement and rehabilitation are to be financed by World Bank and own fund (part of the work is already under way).		
			2. MAJOR REASONS FOR PRESENT STATUS		
			3. PRINCIPAL SOURCES OF INFORMATION		
			①		

和名 東北部道路網整備計画 (フェイズII)

{F/S, (M/P)+F/S, D/D}



## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Laem Chabang	1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Establishment of a Large Repair Shipyard	2. PROJECT COSTS	(US\$1=169.40Yen) Total Cost    Local Cost    Foreign Cost (US\$1,000)    1)            40,000        15,000        25,000 2) 3)	(Description)	<p>Suspended after the completion of the study because of the low feasibility. The Government has been encouraging the private sector investment. JICA is conducting a M/P study on the shipbuilding industry, and reviewing the proposal of the study.</p> <p>Private shipping company and shipyard have jointly operated and going to invest shipyard facilities on the basis of leasing contract of site between Port Authority of Thailand and the company.</p>
3. SECTOR	Transportation/ Marine Transportation & Ships	3. CONTENTS OF MAJOR PROJECT(S)	<ul style="list-style-type: none"> <li>- Dry dock    175m x 28m x d.11.1m</li> <li>- Area of 300m x 300m = 90,000 sq.m by reclaiming for ship repairing</li> <li>- Quay length = 150m</li> </ul>		
4. REFERENCE NO.		Implementation Period:	Jan.1986 - Mar.1990		
5. TYPE OF STUDY	F/S	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR    FIRR 11.4%    5.8%		
6. COUNTERPART AGENCY	Board of Investment	Feasibility:	Yes	2. MAJOR REASONS FOR PRESENT STATUS	
7. OBJECTIVES OF STUDY	Feasibility analysis of a repair shipyard	Conditions and Development Impacts:	<p>The growth rate of the cargo carried by the Thai shipping companies (which has a share of 10% of the total transportation volume) was estimated on the bases of growth of GDP and international trade. The scale of the shipyard was then determined by evaluating the types of ships used and the nature of repair work needed.</p> <p>Development effects will be substantial, because the existing capacity of the domestic repair yards is considerably short of the demand.</p>		
8. DATE OF S/W	Oct.1982	5. TECHINICAL TRANSFER	1) Participation of one counterpart in the JICA training program 2) Employment of local consultants	3. PRINCIPAL SOURCES OF INFORMATION	
9. CONSULTANT(S)	Overseas Ships Building Cooperation Center			①	
10. STUDY TEAM	No. of Members    9 Period            Jul.1984 - May 1985 (11 months)  Total M/M            51.0 Japan            28.0 Field            23.0				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY					
12. EXPENDITURE	Total            146,390 (¥'000) Contracted        158,523				

和名 船舶修理ヤード建設計画

(F/S, (M/P)+F/S, D/D)

PROJECT SUMMARY (F/S)

ASE THA/A 310/85

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT																				
1. COUNTRY	Thailand	1. SITE OR AREA	Whole country			1. PRESENT STATUS <input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input checked="" type="checkbox"/> Discontinued or Cancelled																			
2. NAME OF STUDY	Comprehensive Storage Facilities Development Project (Phase II)	2. PROJECT COSTS	<small>US\$1-202.81Yen in Dec.1984 (R1-5.10yen)</small> <table border="1"> <tr> <td></td> <td>Total Cost</td> <td>Local Cost</td> <td colspan="2">Foreign Cost</td> </tr> <tr> <td>1)</td> <td>42,129</td> <td>21,167</td> <td colspan="2">20,962</td> </tr> <tr> <td>2)</td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td>3)</td> <td></td> <td></td> <td colspan="2"></td> </tr> </table>					Total Cost	Local Cost	Foreign Cost		1)	42,129	21,167	20,962		2)					3)			
	Total Cost	Local Cost	Foreign Cost																						
1)	42,129	21,167	20,962																						
2)																									
3)																									
3. SECTOR	Agriculture/ General	3. CONTENTS OF MAJOR PROJECT(S)	1. Warehouse construction: State level - 10 sites Local level - 5 sites Seaport Warehouse - 1 site at Laem Chabang 2. Improvement on processing and loading facilities for shipping exportable rice: River port - 2 sites (Nonthaburi, Rajburana) Deep sea port - 1 site (Laem Chabang) 3. Grain reprocessing facility: 6 sites 4. Storage technology improvement and training center construction: 1 site (Nonthaburi)			(Description)  In 1986, Thai government revised the rice marketing policy drastically and abolished the conventional government procurement at support prices. Operational scale of PWO reduced abruptly by this change. On the other hand, the government is proceeding an integrated facilities for collecting, processing and exporting agricultural products at the back of the port at Laem Chabang as a national project of building a "Deep Sea Port". In this project, loading facilities for export rice with storage function were once planned. But they are not materialized. The rice exports have long been made from the river port in Bangkok city. The construction of modern facilities by private companies are also in progress. In any way, the Thailand has achieved rice export of 5.7 million tons in 1989. Further rationalization of rice marketing channels and modernization of marketing function of the markets are strongly desired by both government side and private organization.																			
4. REFERENCE NO.		4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR																					
5. TYPE OF STUDY	F/S	Feasibility: Yes	(I) 12.0%	(II) 13.1%																					
6. COUNTERPART AGENCY	Public Warehouse Organization (PWO)	Conditions and Development Impacts:																							
7. OBJECTIVES OF STUDY		Conditions:																							
8. DATE OF S/W	Dec. 1983	1. Recruiting and training of personnel																							
9. CONSULTANT(S)	Overseas Merchandise Inspection Co., Ltd. Sanyu Consultants Inc.	2. Proper management and control																							
10. STUDY TEAM	No. of Members 11 Period Feb. 1984 - Jun. 1985 (7 months)	3. R&D by Cooperation with other organization																							
	Total M/M 40.66 Japan 19.74 Field 20.94	Development Impacts:																							
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		1. Expansion of public activities by PWO																							
12. EXPENDITURE	Total 122,940 (¥'000) Contracted 114,782	2. Support government rice price policies and materialize long-term stabilization of producers' paddy price and consumers' milled rice price																							
		3. Improvement and rationalization of rice marketing by expanding and improving facilities/warehouses at rice markets																							
		4. Continued Sales to existing markets and developing new markets by improving export rice quality and expanding shipping facilities and capacities for loading onto a large sized ocean-going vessels.																							
		5. Reducing losses during storage																							
		6. Support the activities of public organizations such as agricultural cooperatives, BAAC, etc. by offering them the use of Warehouse.																							
		7. Providing services for marketing other agricultural products by offering the use of seasonal empty space and the auxiliary facilities of the warehouse.																							
		5. TECHNICAL TRANSFER																							
			3. PRINCIPAL SOURCES OF INFORMATION																						
			①																						

和名 穀物貯蔵施設整備拡充計画 Phase II

(F/S, (M/P)+F/S, D/D)



## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Coastal routes of Thailand, 43 routes		
2. NAME OF STUDY	Dredging Plant Development Project	2. PROJECT COSTS	(US\$1= 27 Bahts)		
3. SECTOR	Transportation/ Port		Total Cost	Local Cost	Foreign Cost
4. REFERENCE NO.			1) 9,666	2,730	
5. TYPE OF STUDY	F/S		2)		
6. COUNTERPART AGENCY	Harbour Department, Ministry of Transport and Communication	3. CONTENTS OF MAJOR PROJECT(S)	3)		
7. OBJECTIVES OF STUDY	Frame of long-range dredging plan target in 2000 and development plan including improvement and maintenance of facilities.		Mechanical center slipways 165 m X 1 Training hopper dredging boat 1 (Hopper Volume;100 cu.m)		
8. DATE OF S/W	Feb.1985	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR FIRR 12.2%		
9. CONSULTANT(S)	Overseas Coastal Area Development Institute of Japan.	Feasibility: Yes	Conditions and Development Impacts: Comparison of the proposed project under two conditions: with case and without case. Cost and benefit is shown with cost of 1985 (1 baht = 9.01 yen) As the effect of development, improvement of the dredging capability, possibility of the effective maintenance and repair of the dredging boat, and possibility of the development for the community are given.		
10. STUDY TEAM	No. of Members 8 Period May 1985 - Jun.1986 (14 months)  Total M/M 49.47 Japan 18.17 Field 31.3	5. TECHINICAL TRANSFER	The business training was carried out at some Japanese important port, Port and Harbour Research Institute, and some shipyard, etc.		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY					
12. EXPENDITURE	Total 133,282 (¥000) Contracted 119,922				
		1. PRESENT STATUS		<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input checked="" type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled	
		(Description)		Suspended after the completion of F/S due to the lack of fund.  F/S must be reviewed, because the exchange rate has largely changed since the last F/S.	
		2. MAJOR REASONS FOR PRESENT STATUS		Delay due to the ceiling on the government budget	
		3. PRINCIPAL SOURCES OF INFORMATION		①	

和名 港湾浚渫船隊整備計画

[F/S, (M/P)+F/S, D/D]

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Bang Nara River Basin of Nava Tik Province in Southern Thailand			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Discontinued or Cancelled <input type="checkbox"/> Processing
2. NAME OF STUDY	Bang Nara Irrigation and Drainage Project	2. PROJECT COSTS	(US\$1=20Bahts in 1985)			
3. SECTOR	Agriculture/ General		Total Cost	Local Cost	Foreign Cost	(Description)  As one of grant aid projects of the Japanese Government,  Detail Design (Feb. 1988 - June 1988) E/N Contract (Sep. 30, 1988) Implementation (Starting from Oct. 1988) Completion (Nov. 1990)
4. REFERENCE NO.		(US\$1,000)	1) 25,240,000	10,320,000	14,920,000	
5. TYPE OF STUDY	F/S		2)			
6. COUNTERPART AGENCY	RID (Royal Irrigation Department)	3. CONTENTS OF MAJOR PROJECT(S)	3)			
7. OBJECTIVES OF STUDY		- To construct tidal gates both in Nara Tik side and Tagbai side of Bang Nara River				
8. DATE OF S/W	Jul. 1984	- Pumping irrigation by utilizing planned reservoir with 9 pumping stations				
9. CONSULTANT(S)	Sanyu Consultants, Inc. Japan Engineering Consultants co., Ltd.	- Rehabilitation of drainage rivers flowing into Bang Nara River				
10. STUDY TEAM	No. of Members 12 Period May. 1985 - Jan. 1987 (21 months)  Total M/M 106.23 Japan 42.55 Field 63.68	- To install 6 check gates to control acid water				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Implementation Period:				
12. EXPENDITURE	Total 293,737 (¥'000) Contracted 271,828	4. FEASIBILITY AND ITS ASSUMPTIONS	BIRR	FIRR		
		Feasibility: Yes	10.2%			
		Conditions and Development Impacts: The beneficial area: - by pumping irrigation for existing paddy fields, 9,100 ha - by rehabilitation of river, 5,280 ha for paddy fields and 6,210 ha for rubber fields  The main purpose of the project is to utilize Bang Nara water resources for irrigation and to control the flood in rainy season.				
		5. TECHNICAL TRANSFER				
					2. MAJOR REASONS FOR PRESENT STATUS	
					3. PRINCIPAL SOURCES OF INFORMATION	
					①	

和名 パンナラ川かんがい排水計画

[F/S, (MP)+F/S, D/D]

PROJECT SUMMARY (Other)

ASE THA/S 602/86

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	Bangkok Metropolitan Area		1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Road Improvement, Rehabilitation and Traffic Safety in Bangkok	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	Total Cost	Local Cost	
3. SECTOR	Transportation/ General	(US\$1,000)	1)	2)	(Description) Many traffic safety projects were carried out along with the guideline and designs by Thai government budget and they are now in sound operation. Construction project of Rama IV continuous grade separation bridge is now under construction by Japanese grant aid.
4. REFERENCE NO.		3. MAJOR PROJECT(S) PROPOSED			
5. TYPE OF STUDY	Other	The study compiled basic information on traffic safety planning and recommended some road improvements.			
6. COUNTERPART AGENCY	Bangkok Metropolitan Administration	-Continuous grade separation -Intersection improvement -Pavement improvement -Busstop improvement -Pedestrian path -Median -Traffic sign -Pedestrian crossing bridge among others.		-Guard fence -Safety island -Traffic signal -Road marking	
7. OBJECTIVES OF STUDY	Policy recommendations on traffic safety measures	4. CONDITIONS AND DEVELOPMENT IMPACTS			
8. DATE OF S/W	Mar. 1985	The study results will contribute to the planning process on traffic safety measures, road improvement and pavement repairs. Small scale improvement engineering for traffic safety was efficiently transferred through proposing an engineering guideline and actual design on each actual spot, and carrying out of model project simultaneously.			
9. CONSULTANT(S)	International Engineering Consultants Association	5. TECHNICAL TRANSFER			
10. STUDY TEAM	No. of Members 29 Period Jun. 1985 - Mar. 1987 (22 months)  Total M/M Japan 7.01 Field 143.93	1) OJT on the evaluation method of pavement; 2) Participation of the counterparts in the JICA training program (road administration and road improvement); 3) Employment of local consultants (traffic survey, inventory survey, pavement survey, etc.)			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY				2. MAJOR REASONS FOR PRESENT STATUS	
12. EXPENDITURE	Total 412,771 (¥'000) Contracted 4,182			3. PRINCIPAL SOURCES OF INFORMATION ①	

和名 バンコク首都圏庁バンコク市道路改良・交通安全計画

{M/P, M/P+(F/S), Basic Study, Other}

PROJECT SUMMARY (M/P)

ASE TH/A 102/87

Compiled March 1990  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	An Area of 20,000sq.km extended over Kanchanaburi Province and other 4 provinces in the western part of the Central Plain Region		1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Aerial Photography and Forest Management Plan in the Encroached National Reserve Forest	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	Total Cost	Local Cost	
3. SECTOR	Forestry/ Forestry & Forest Conservation	(US\$1,000)	1)	2)	(Description)  In order to prepare a project based on the proposed plans, the Royal Forest Department has been ironing out the handling of the existing projects by itself. The proposed plans contain various types of projects. Therefore Japan will be needed for supporting to prepare a project by conducting a follow-up survey and/or an experimental project.
4. REFERENCE NO.		3. MAJOR PROJECT(S) PROPOSED			
5. TYPE OF STUDY	M/P	In order to contribute to management of the Encroached National Reserve Forest, the Model area was set up in the above mentioned areas and working plans were formulated in each 3 types of areas in the Model Area as follows: 1.Forestry Area : Forest management plan for the proper and sustainable production 2.Agroforestry Area: Forest Village plan for local people 3.Preserved Area : Forest conservation plan for National Park and soil and water conservation			
6. COUNTERPART AGENCY	Royal Forest Department Ministry of Agriculture and Cooperatives	4. CONDITIONS AND DEVELOPMENT IMPACTS			
7. OBJECTIVES OF STUDY	This forest management plan is formulated in order to restore the function which the forest had originally had in the area of the degraded national reserve forest.	The above mentioned plans will improve forests for timber supply, National Park and forests for soil and water conservation so that deforestation will be reduced. And the Forest Village plan will enhance the settlements of farmers who live in the encroached National Reserve Forest. It is necessary to improve the road networks and develop researches of tree growth. When dealing with the proposed plan of a forest village in the model area, the authorities concerned need to iron out the handling of the settlement with the persons concerned.			
8. DATE OF S/W	Jul.1985	5. TECHINCAL TRANSFER			
9. CONSULTANT(S)	Japan Forest Technical Association Kokusai Kougyo Co.,Ltd.	1.To Accept the trainees out of counterparts 2.To conduct jointly field works such as forest inventory survey, a soil survey and a survey on the Forest Villages and Tropical Farming 3.To practice works on preparation of the topographic map 4.To jointly works on arrangement and analysis of information and reference materials 5.To jointly works on aerial-photo interpretation and preparation of forest type maps			
10. STUDY TEAM	No. of Members 19 Period Oct.1985 - Mar.1988 (31 months)  Total M/M 160.00 Japan 90.00 Field 70.00	2. MAJOR REASONS FOR PRESENT STATUS			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		3. PRINCIPAL SOURCES OF INFORMATION		①	
12. EXPENDITURE	Total 450,604 (¥000) Contracted 434,600				

和名 国有林管理計画

{M/P, M/P+(F/S), Basic Study, Other}

## PROJECT SUMMARY (F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	New Krung Thep Bridge: downstream side of existing Krung Thep Bridge over Chao Phraya River Thon Buri Road: between Middle and Outer Ring Roads, Thon Buri Area.			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	New Krungthep Bridge Construction and Thonburi Road Extension	2. PROJECT COSTS	(US\$1=153Yen)			
3. SECTOR	Transportation/ Road		Total Cost	Local Cost	Foreign Cost	(Description) The D/D was completed for yen credit application. (1) Krung Thep Bridge: Detailed design made by Norcon(Norway) and Thai consultants. (2) Thon Buri Road: Detailed design of the first section (3.5km) completed under a local tender.
4. REFERENCE NO.		(US\$1,000)	1) 190	120		
5. TYPE OF STUDY	F/S		2) 2,470	1,830		
6. COUNTERPART AGENCY	Public Works Department	3. CONTENTS OF MAJOR PROJECT(S)	1) Krung Thep Bridge: PC box bridge 442 m Four-lane elevated approach Simple interchange 2) Thon Buri Road: 9.4 km bypass			
7. OBJECTIVES OF STUDY	Construction of PC bridge	Implementation Period:	Oct.1988 - Oct.1995			
8. DATE OF S/W	Nov.1985	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
9. CONSULTANT(S)	Nippon Koei Co., Ltd. Central Consultant Inc.	Feasibility: Yes	1) 20%	2) 41%		
10. STUDY TEAM	No. of Members 10 Period Feb.1986 - Jun.1987 (17 months) Total M/M 39.73 Japan 1.73 Field 38.00	Conditions and Development Impacts: Krung Thep Bridge: Estimates were made of the volume of traffic at three points in time in the future. Thon Buri Road: The development plan for the road network covering the whole of Bangkok was used for reference. The New Krung Thep Bridge, which will be built next to the existing Krung Thep Bridge, will play a vital role in improvement of traffic conditions on the circular roads running through Bangkok. Extension of Thon Buri Road will contribute to improvement of conditions in residential areas and to mitigation of traffic jams.				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Sublet amount for field survey 9,382,000 yen	5. TECHINCAL TRANSFER	(1) Two counterpart were invited to Japan for training (2) Use of local consultants			
12. EXPENDITURE	Total 142,329 (¥'000) Contracted 129,651				2. MAJOR REASONS FOR PRESENT STATUS (1) Aging of the existing Krung Thep Bridge (2) Strong support by Public Works Dept.	
					3. PRINCIPAL SOURCES OF INFORMATION ①	

和名 新クルンテップ橋及びトンプリ道路延伸計画

(F/S, (M/P)+F/S, D/D)





## PROJECT SUMMARY (Other)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	Port of Bangkok, Port of Laem Chabang, Port of Map Ta Phut, Port of Sattahip, Port of Phuket, Port of Song Khla			1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Effective Port Management and Operation System	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	Total Cost	Local Cost	Foreign Cost	
3. SECTOR	Transportation/ Port	(US\$1,000)	1)	2)		(Description) The National Port Administration Commission was established in the Ministry of Transport and Communication by accepting recommendations of the study.
4. REFERENCE NO.		3. MAJOR PROJECT(S) PROPOSED	Recommendation of port management			
5. TYPE OF STUDY	Other		-Determination of fundamental concept for the port planning and development policy. -Making of the port management policy. -Preparation for the operation and management as an international port.			
6. COUNTERPART AGENCY	Ministry of Transport and Communication					
7. OBJECTIVES OF STUDY	-Formulation of a framework for port operation					
8. DATE OF S/W	Feb. 1986	4. CONDITIONS AND DEVELOPMENT IMPACTS	Effective port service is indispensable for Thai economic activity, and at the same time port development is emphasized its importance as main infrastructure for promotion of industrial location and as a core of regional economical development.			
9. CONSULTANT(S)	The Overseas Coastal Area Development Institute of Japan (OCDI)					
10. STUDY TEAM	No. of Members 12 Period Aug. 1986 - Mar. 1988 (8 months)  Total M/M 99.90 Japan 48.44 Field 51.36					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHNICAL TRANSFER	The study of port management was carried out for the counterpart.			
12. EXPENDITURE	Total 265,006 (¥'000) Contracted 265,693					
		2. MAJOR REASONS FOR PRESENT STATUS				
		3. PRINCIPAL SOURCES OF INFORMATION			①②	

和名 効果的港湾システム調査

{M/P, M/P+(F/S), Basic Study, Other}

PROJECT SUMMARY (M/P)

ASE THA/S 104/88

Compiled March 1986  
Revised March 1992

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF USE OF STUDY RESULTS		
1. COUNTRY	Thailand	1. SITE OR AREA	Chao Phraya River Basin (162,000 sq.km)		1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued	
2. NAME OF STUDY	Flood Forecasting System in the Chao Phraya River Basin	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	(US\$1=130Yen) Total Cost    Local Cost    Foreign Cost			
3. SECTOR	Social Infrastructures/ River & Erosion Control	(US\$1,000)    1)    55,948 2)	3. MAJOR PROJECT(S) PROPOSED		(Description) Royal Irrigation Department highly appreciated the study and prepared to pledge for the grant aid for the urgent projects among the proposed plans.	
4. REFERENCE NO.		Step 1: Flood forecasting system started with the existing facilities as the bases and by adding auxiliary equipment as required. This system is composed of (1) 34 of rainfall gauging stations, (2) 31 of water level gauging stations, (3) 54 of HF radio stations, (4) 7 of VHF radio stations, and (5) one set of data management system				
5. TYPE OF STUDY	M/P	Step 2: Flood forecasting system with latest equipment and facilities operated under full flood forecasting organizations. This system is composed of (1) 65 of rainfall gauging stations, (2) 19 of water level gauging stations, (3) 19 of rainfall/water level gauging stations, (4) 2 of radar rainfall gauging stations, (5) 110 of VHF radio stations, (6) 15 of VHF repeater stations, (7) 2 of VHF radio stations, (8) 5 of sub-stations, (9) 6 of terminal stations of TOT, (10) one of flood forecasting center, and (11) one set of data management system.				
6. COUNTERPART AGENCY	Royal Irrigation Department	4. CONDITIONS AND DEVELOPMENT IMPACTS				
7. OBJECTIVES OF STUDY	Formulation of a flood forecasting system over Chao Phraya river basin	The flood forecasting system opens up to the possibilities of highly reliable flood forecasting services through collection of flood information from extensive areas of the Chao Phraya River basin. The communication networks of the flood forecasting systems render great services in communication other than flood forecasting. It is expected to mitigate the flood damage at the main urban areas along the river course such as Nakon Sawan, Chai-Nat, Ayutaya, Bangkok, etc. through the efficient flood fighting works and evacuation of the inhabitants. Besides, the hydrological data collected and managed by this system can be used as the basic data to formulate the comprehensive flood control plan in the Chao-Phraya River Basin.				
8. DATE OF S/W	Jul.1986	5. TECHINCAL TRANSFER				
9. CONSULTANT(S)	CTI Engineering Co.,Ltd. Nippon Koei Co.,Ltd.	Execution of an intensive lecture course to counterparts on hydrologic computation procedures.				
10. STUDY TEAM	No. of Members    11 Period            Feb.1987 - Jun.1988 (16 months)  Total M/M        73.32 Japan         38.47 Field         34.85	2. MAJOR REASONS FOR PRESENT STATUS				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Survey	Though the agency in charge has intention of making request for the grant aid, the final stage in approaching to the Japanese agency in charge has not been realized yet.				
12. EXPENDITURE	Total            209,304 (¥'000) Contracted      183,794	3. PRINCIPAL SOURCES OF INFORMATION				
		①				

和名 チャオピア川洪水予報システム計画

(M/P, M/P+(F/S), Basic Study, Other)

## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF USE OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	Central Region (26 changwats, including Bangkok; 104,000 sq.km, pop. 17 million)		1. PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Road Development in the Central Region	2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS	Total Cost	Local Cost	
3. SECTOR	Transportation/ Road	(US\$1,000)	1)		
4. REFERENCE NO.		2)			
5. TYPE OF STUDY	M/P+(F/S)	3. MAJOR PROJECT(S) PROPOSED	National highways: - The increase of lanes and new highway construction are necessary in many places. - It will be necessary in the future to develop a road network with inter-city expressways. Provincial roads: - 24 routes (total length 629.8km) are selected for feasibility analysis - It will be necessary in the future to improve 85 routes (2,017km) Repairs: - The study suggested a simple design method for repair work.		
6. COUNTERPART AGENCY	Dept. of Highways, Ministry of Communications	4. CONDITIONS AND DEVELOPMENT IMPACTS	See next page.		
7. OBJECTIVES OF STUDY	Road development	5. TECHNICAL TRANSFER			
8. DATE OF S/W	Feb. 1987				
9. CONSULTANT(S)	Katahira & Engineers International, and Nippon Koei Co., Ltd.				
10. STUDY TEAM	No. of Members 10 Period Aug. 1987 - Mar. 1989 (20 months)  Total M/M 85.8 Japan 15.7 Field 70.1				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Traffic survey by vehicle type, O/D survey, road inventory survey, boring and road surface survey				
12. EXPENDITURE	Total 338,279 (¥000) Contracted 328,737				
		2. MAJOR REASONS FOR PRESENT STATUS		See the next page.	
		3. PRINCIPAL SOURCES OF INFORMATION		①	

## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Central Region (26 changwats, including Bangkok; 104,000 sq.km, pop. 17 million)			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Road Development in the Central Region	2. PROJECT COSTS	Total Cost	Local Cost	Foreign Cost	
3. SECTOR	Transportation/ Road		(US\$1,000)			(Description)  15 routes out of 21 are under construction by OECF finance (L/A 1988 Nov. 4,117 million yen). ML-5 (Chonburi - Pataya) has been under construction since Aug. 1990.  1990 Dec. OECF loan agreement (15,497 million yen) Construction scheduled to commence in FY1992.  Of the remaining routes, D/D for ML-9 (Bangkok-Chonburi new highway) is under way with World Bank finance.
4. REFERENCE NO.			1) 398,960	202,640	196,320	
5. TYPE OF STUDY	(M/P)+F/S	3. CONTENTS OF MAJOR PROJECT(S)	2) -			
6. COUNTERPART AGENCY	Dept. of Highways	1) Construction of expressways: 7 projects total length 320.3km	3) -			
7. OBJECTIVES OF STUDY	Road development	2) Road improvement: 11 projects total length 297.2km				
8. DATE OF S/W	Feb.1987	3) Road rehabilitation: 3 projects total length 96.7km				
9. CONSULTANT(S)	Katahira & Engineers International, and Nippon Koei Co., Ltd.	Implementation Period:	1991 - 1993			
10. STUDY TEAM	No. of Members 10 Period Aug.1987 - Mar.1989 (20 months)  Total M/M 85.7 Japan 15.7 Field 70.1	4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Traffic survey by vehicle type, O/D survey, road inventory survey, boring and road surface survey	Feasibility: Yes	1) 15.1 - 39.6%	2) 15.1 - 39.6%		
12. EXPENDITURE	Total 338,279 (¥000) Contracted 328,737	Conditions and Development Impacts: Trunk road projects are selected to alleviate traffic congestions and to support the national project (Eastern Seaboard Development). Provincial road projects are selected to stimulate regional development and to provide socio-economic needs of the population. Feasibility analysis was undertaken on 21 projects which the Dept. of Highways assigned high priority. All the routes analyzed were found to be feasible.	3) 74.2 -			
		5. TECHNICAL TRANSFER				
		Instruction on how to formulate the M/P, F/S, and survey.			2. MAJOR REASONS FOR PRESENT STATUS Selected routes were consistent with the policy of the Thai Government.	
					3. PRINCIPAL SOURCES OF INFORMATION ①	

和名 中央部道路網整備計画

{F/S, (M/P)+F/S, D/D}



## PROJECT SUMMARY (M/P + F/S)

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA	Four provinces in the eastern Thailand facing or close to the sea (Chachoengsao, Chonburi, Rayon, and Chanthaburi)			1. PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Agricultural Land and Conservation for Integrated Rural Development in the East	2. PROJECT COSTS	by 1988 price Total Cost    Local Cost    Foreign Cost (US\$1,000)    1)            2)            3) 6,649        4,063        2,587			
3. SECTOR	Agriculture/ General	3. CONTENTS OF MAJOR PROJECT(S)	Sixteen districts, which need the urgent measures to conserve lands and water, were selected as the proposed sites of pilot projects out of four provinces where extensive farming has been practiced under the harsh natural conditions. Simple F/S was carried out based on the above ideas. The construction costs are estimated at US\$ 6,649 million in total (local 4,063 plus foreign 2,587).			(Description)  Progress:  The Thai Government intends to implement the 16 pilot projects for agricultural land conservation, which were worked out through F/S, according to the priority orders given to each project. The Thai Government requested the grant aid of the Japanese Government for procuring the machineries for civil engineering and construction as well as those for farming operation which are required to implement the projects. The Japanese Government, in response to the request, has done B/D surveys. The equipments are arriving in March 1992. And Project-type Technical Cooperation also be carried out.
4. REFERENCE NO.		4. FEASIBILITY AND ITS ASSUMPTIONS	EIRR	FIRR		
5. TYPE OF STUDY	(M/P)+F/S	Feasibility: Yes	10.4%			
6. COUNTERPART AGENCY	Ministry of Agriculture and Cooperatives Department of Land Development (DLD)	Conditions and Development Impacts:	<ul style="list-style-type: none"> <li>The benefit from crop cultivation accounts for 92% of the total.</li> <li>Creation of employment opportunities</li> <li>Improvement of living standard of villagers as well as activation of economic circumstances of the area</li> <li>Improvement of the security of the area</li> <li>Saving and obtaining foreign currencies</li> <li>Preservation of ecosystem</li> <li>Preservation of water resources and prevention of disasters</li> <li>If the expenses for procuring construction machinery are deleted, EIRR will raise to 13.1%</li> </ul>			
7. OBJECTIVES OF STUDY	Building up the ability of project execution	5. TECHNICAL TRANSFER	<ul style="list-style-type: none"> <li>Acceptance of three trainees for in-service training in Japan</li> <li>-OJT</li> <li>-Organizing seminars at the DLD main office</li> </ul>			
8. DATE OF S/W	Feb. 1987	2. MAJOR REASONS FOR PRESENT STATUS				
9. CONSULTANT(S)	Taiyo Consultants Co., Ltd. Sanyu Consultants Inc.	Conservation of agricultural lands, which plays a key role in preservation of the environment, is deemed as one of the measures of top priority. Therefore, it should be implemented urgently, and the Thai Government requested the assistance through the grant aid scheme.				
10. STUDY TEAM	No. of Members 12 Period Sep. 1987 - Sep. 1988 (13 months)  Total M/M 68.45 Japan 22.98 Field 45.47	3. PRINCIPAL SOURCES OF INFORMATION				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic survey Analysis of soil samples	①				
12. EXPENDITURE	Total 213,841 (¥'000) Contracted 202,533					

和名 東部タイ農地保全総合開発計画

(F/S, (M/P)+F/S, D/D)